A Model For a Performance Based Elementary Teacher Education Program at Shaw University. Final Report, Part II.

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This is the second part of a report on the elementary teacher education program at Shaw University. It contains a description of the current program for elementary education majors, a review of six models for elementary teacher education, a review and synthesis of three models most applicable to Shaw University proposed changes in the undergraduate program for elementary teachers, and the master's program in elementary education. Other sections deal in some detail with 1) an innovative project to motivate seventh and eighth grade students in selecting their own learning activities, 2) a survey of the likes and dislikes of seventh and eighth graders, 3) report on S.R.A. test series data, 4) report on Gray's paragraph reading test data, 5) report on charrette experiences, 6) a summary of causes on joyless school moments, 7) the charrette evaluation, 8) summary of innovative project, 9) developing a hierarchy of content suitable for achieving behavioral objectives, 10) an historical approach to educational objectives, 11) modern educational objectives 12) introductions to four demonstrations, 13) hierarchy of content for Phase II of the educational project, 14) innovative modules, and 15) model summaries. Part I of the report is ED 044 354. (MEM)
A Model For a Performance Based Elementary Teacher Education Program at Shaw University

N. M. McMillan, Director
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Raleigh, North Carolina

June 30, 1971

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PREFACE

Educational programming at best is a cooperative venture. In addition, it is also developmental and experimental.

The realization of these goals must involve all who are a part of the administrative, supervisory, and teaching corps. It also must involve the recipients in planning these goals.

The Teacher Education Department at Shaw University is in the business of training teachers for educational planning. The University is concerned with providing opportunities for prospective teachers to participate in experimental programs that will provide the expertise necessary for proficiency in planning.

The University is interested in providing a sort of team relationship between the university and the public school system. The team relationship strengthens both the educational program of the university and the public school system. They complement each other in program building.

This project could not have been a success without the cooperation of the Wake County Administrative School Unit.

We are deeply indebted to Mr. Aaron A. Fussell, Superintendent, Wake County Schools, Mr. Carl Mills, Assistant Superintendent, Wake County Schools, and Mrs. Caesarea D. Debnam, Supervisor, Wake County Schools. Their cooperation, ideas, and encouragement were indeed helpful in planning and promoting this project.

We are also indebted to Mr. M. Grant Batey, Principal, East Garner Junior High School and Mr. Robert F. Williams, Principal, Millbrook Elementary School, for their cooperation, ideas and encouragement in promoting and completing this project.

In addition, we are grateful to the counselors and teachers at the two schools for their contribution to the development of the project.

To the one hundred students who participated in the project, we are indeed grateful for their support, and may we, one day, see and count them in this great innovative arena of teacher education. They were indeed, a group of highly intelligent, innovative and eager youngsters.
INTRODUCTION

The Model: A Comprehensive Program for the Training of Elementary School Teachers at Shaw University is a developmental project designed to improve teacher education at Shaw University. The model is focused on improving the proficiency of elementary school teachers.

Criticism has come thick and fast from all corners of the educational spectrum that our graduates in teacher education do not have the proficiency to cope with the tasks that unfold themselves in their respective situations.

Criticisms reveal that teachers do not have the confidence and expertise to participate in planning, developing and directing learning in their assigned positions.

In the development of this model the Teacher Education Department of Shaw University has perhaps discovered some justification for this criticism.

It was indicated above that the model has been developmental, and it has. The project began during the summer of 1969. The project during the following year served as a background for future study. The Teacher Education faculty studied nine (9) models in teacher education which were developed by nine (9) different universities.

The project developed during the first year was: A Proposed Comprehensive Program for the Training of Elementary Teachers at Shaw University.

This project provides opportunities for the faculty to gain experiences in setting up a performance-based teacher education program that will be more specific, directive and measurable in terms of goals and purposes.

As a result of a series of meetings with other universities and colleges in the consortium, improvements were made at this developmental stage.

Part II of the project, which is an outgrowth of Part I, is an innovative project in helping seventh and eighth grade students in selecting their own learning activities. This project brought together public school officials, university faculty and students on an experimental project providing seventh and eighth graders with the opportunity to select their own learning activities. The project was a success as indicated in this report.
Along with this project, the Teacher Education Department developed a module on Innovative Modules for Teacher Education.

This phase of the model indicates that the Teacher Education faculty is ready now to move into a higher plateau of educational planning and programming.

The model is based on the following assumptions:

1. That at present there are several individual philosophies on what an ideal teacher education program should be. We therefore, hold firm to the idea that an ideal teacher education program should involve students, college professors, public school teachers, researchers, and laymen in the formulation of an effective teacher education program.

2. We believe that teacher education should be continuous in nature and that teachers should be educated to participate in educational planning for a changing society. Therefore, the teacher education program of today must be prepared to train teachers to teach the children of tomorrow.

3. We believe that an ideal teacher education program must be flexible and must have a set of built-in human values for the purpose of generating feedback, that will make for a renewing and continuous program of education.

4. We believe that a teacher education program that is self-renewing in nature must have college professors that are self-renewing. This means that a continuous in-service training program is imperative.

5. We believe that the ideal teacher education program must provide for individual differences. Therefore, the program should permit students to advance at their own pace, and should contribute to the ongoing progress of the teacher education program.

6. We believe that the teacher education program at best should make for the involvement of public school personnel, other educational institutions, significant lay personnel, and college students.

One of the inevitable features of our proposal is the concept of inevitability of change. We believe that education must gear itself to change and that educational departments must participate in the structure around which society must work and evolve.
To be effective in their participation, teachers must behave and become at a level that makes for efficiency. Teachers who must accept a lion's share of involvement in societal educational structure, must be directors, consultants, advisors, planners, leaders, and thinkers.

To do this the Teacher Education Department must specify personal and professional objectives for the student on the behavioral level. These objectives must and should be a part of an instructional program. The program should be spelled out into operational objectives, instructional situations and criteria for the assessment of student performance. A section of this model is a module on Innovative Modules for Teacher Education, and it sets forth Behavioral Objectives, Performance Criteria, Methods and Materials and Evaluation and steps in learning situations sequentially arranged.

The model program points up direction for the organization of the teacher education program at Shaw University to develop elementary teachers who will have the following concepts:

1. A positive concept of self development
2. A strong value system
3. A sensitivity to the problems of the disadvantaged
4. The capability of motivating learners
5. A sensitivity to professional ethics
6. Dedication to efficiency and mastery
7. The commitment to get along with others with whom they work
8. The commitment to community development

The teacher education program is composed of the following components:

1. Methods and curriculum
2. Child development
3. Teaching theory and practice
4. Professional sensitivity training
5. Socio-cultural foundation
6. General studies program
7. Self-directed programs

The model program has been intentionally designed to make initial use of many more promising ideas in the field of teacher
education. Among these are the following:

1. Professional sensitivity training
2. Micro-teaching
3. Simulation
4. Objective analysis of instruction
5. Largely self-paced, modularized instruction
6. Video tape feedback of teaching behavior
7. Programmed instruction
8. Resident service as a technique for initial professional induction

The model has been developed through the concerted effort of the members of the teacher education faculty and the students in the Teacher Education program at Shaw University. The groups have been cognizant of the dynamic social changes, have been sensitive to the needs of society and have worked together in the development of this model.
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SUMMARY OF PHASE I
OF
A PROPOSED COMPREHENSIVE PROGRAM FOR THE TRAINING
OF ELEMENTARY SCHOOL TEACHERS AT SHAW UNIVERSITY

INTRODUCTION

Phase I of the project reviewed nine sets of specifications for comprehensive undergraduate and in-service teacher education programs for elementary school teachers and considered the implications for Shaw University of three of the models. The three models selected for consideration were developed by:

1) Florida State University
2) University of Georgia
3) University of Massachusetts

As a part of Shaw University's plans to revise and update its teacher education program, the nine models were examined and an in-depth study was made of three of the models. This examination included seminars, workshops, and visits to educational centers by members of the Shaw faculty engaged in the study and visits to this institution by consultants.

This project considered it most important that the teaching faculty and other staff members of the total University be informed of the overall purpose and procedures of the project. Information was presented in orientation sessions of faculty and staff, and progress reports were presented to the faculty at intervals to evaluate the program.

Workshops and seminars involving faculty members, especially those assigned to the task of developing the program, were built into the projects. Phase I model consultants and resources were utilized.

Contacts, through visits and reports, were made with other institutions that are cooperating with the USOE Project.

The Division of Teacher Education at Shaw University reviewed its elementary teacher education program. This project provided the resources required to study nine USOE Projects relating to the preparation of elementary school teachers. The nine projects were completed through contracts with the Department of Health, Education, and Welfare by the following institutions:
1) Columbia University  
2) Florida State University  
3) Michigan State University  
4) Northwest Regional Laboratory  
5) University of Pittsburgh  
6) Syracuse University  
7) University of Toledo  
8) University of Georgia  
9) University of Massachusetts  

These nine projects were considered by the teacher education faculty at Shaw University to represent new approaches in the preparation of elementary school teachers. The funds in the project provided the resources needed to examine each of the nine proposals for philosophy, concepts, and detailed approaches and strategies which could be relevant in redeveloping the Elementary Teacher Education Program at Shaw University. In addition, three of the nine proposals selected had concepts which could be applicable and adaptable to a developing university like Shaw.

Specific Objectives

The objectives of this project were to:

1) Review the nine projects listed above.
2) Select the ideas which were most applicable in redeveloping the program for preparing elementary school teachers.
3) Provide time and resources for a task force study of the elementary teacher program at Shaw University and make recommendations for its development.
4) Test the feasibility of parts of the model projects at a developing institution.

Procedure

A task force of teacher educators reviewed the nine projects on elementary teacher education. Three projects were selected for
detailed review and synthesis of ideas relevant to Shaw University. Orientation sessions, workshops, and seminars were conducted to inform other faculty members of the purpose and progress of the project. The members of the task force also visited other institutions which had teacher education programs for preparing elementary school teachers.

Upon completion of its review the tasks force prepared a list of recommendations for Shaw University.

**Use To Be Made Of Findings**

This report will be disseminated, upon request, to all colleges and universities interested in elementary education at developing institutions. Copies will also be sent to the U. S. Office of Education for further dissemination.
Section II

CURRENT PROGRAM FOR ELEMENTARY EDUCATION MAJORS

The Program for elementary teachers at Shaw University was divided into two phases. In the first phase, a general education program was required of all students during the first two years of their college program, irrespective of their major field of study. The second phase covered the last two years of their college program and concentrated on the student's major area of specialization.

Phase One Of The Program For Elementary Education Majors
(First two years is general education)

Their general education program consisted of three courses in English which dealt with grammatical structure and semantic and expository analysis. Two courses in Mathematics provided instruction in basic mathematical systems with applications in algebra, trigonometry, geometry, and calculus. A course in Life Science, focused on biology, and one in Physical Science on science and environmental problem.

Three courses in Communications provided an integrated background of theory and practice to enable the student to become a more effective communicator. The program also included two courses in World Civilization, three in Afro-American Studies and three electives from the area of Urban Science. Three terms of Physical Education also were required.

Phase Two Of The Program For Elementary Education Majors
(Major Courses For All Elementary Education Majors Subject-Matter Preparation)

The subject-matter preparation for all elementary education majors included one course in American Literature; Art Survey and Drawing Courses; Music Essentials for Classroom Teachers and Teaching Music in Elementary School; School and Community Health, Physical Education for Teachers, Principles and Methods of Teaching Health Education; two courses in American History; Principles of Geography and Regional Geography; and a Political Science course on U. S. Federal Government. In addition to these subject matter courses, elementary education majors were required to have a concentration (18) hours in one or more of the following subject areas: English, Mathematics, Music, Science or Social Studies.
Professional Education Courses for Elementary Education Majors

The following were the professional education courses that were required: The American School System; Child Psychology; Parent-School-Community Relations; the Role of the Teacher; Children's Literature; Multi-Media Resources and their use in Education; Measurement and Evaluation; Teaching Mathematics in the Elementary School; Teaching Science in the Elementary School; Teaching Communication Skills in the Elementary School; Teaching Social Sciences in the Elementary School; and a Correlated Course in Methods and Student Teaching.
Section III

REVIEW OF SIX MODELS FOR ELEMENTARY TEACHER EDUCATION

A careful in-depth analysis of the nine models: Columbia University, Florida State University, Michigan State University, Northwest Regional Laboratory, University of Pittsburgh, Syracuse University, University of Toledo, University of Georgia, and the University of Massachusetts revealed the following conclusions:

1) Each model proposes a plan for preparing elementary teachers-

2) Each model is built on the assumption that schools will have to change.

3) Each model tends to move from course descriptions of teacher preparation toward the description of specific competencies desired. Each model has built in segments with clusters of behavioral objectives grouped together.

4) Each model is pointing in the direction of a field-oriented approach to elementary teacher training where the student will work with children.

5) Each model attempts to individualize the instructional program. It is possible to hold one student on work that he needs while another moves on.

   a. Programs are set up to help students to administer the programs to himself.

   b. Programs are designed to get immediate feedback. If an objective is not being achieved, this is known immediately.

   c. The models are built around a belief that the teacher's knowledge must, of necessity, become more specialized.

6) Each model requires considerable funding for implementation.
Section IV

REVIEW AND SYNTHESIS OF THREE MODELS MOST APPLICABLE TO SHAW UNIVERSITY

The following projects were selected as most applicable to a developing institution such as Shaw University. They were:

1) Summary of a Model for the Preparation of Elementary School Teachers, The Florida State University-Project No. 8-9021, Contract No. OEC-0-089021-33008 (010) U.S. Dept. of HEW.

2) Model Elementary Teacher Program, University of Massachusetts. Project No. 8-9023 Grant No. OEG-0-8-089023 (010).

3) Georgia Education Model Specifications for the Preparation of Elementary Teachers, University of Georgia. Project No. 8-9024, Grant No. OEC-0-089024-3311-(010)

Each projected model of elementary teacher education was considered in detail. The projected models contained both similar and divergent concepts which were considered relevant to redeveloping the elementary teacher education program at Shaw University. A synthesis of the concepts found in all three projected models for elementary education can be summarized as follows:

1) Some philosophical bases for elementary teacher education at a developing institution should include:
   a. Preparation that is sufficiently flexible to equip teachers for teaching in various environments.
   b. The establishment of performance criteria for students.
   c. Provision for multiple instructional strategies and routes.

2) There should be a more careful and earlier screening of applicants for teacher education.

3) An emphasis on the development of positive human relations attitudes and behavior is a requisite.
4) There is an important correlation between teacher education and teaching competence. These competences should include:

a. Subject matter competency.
b. Presentation competency.
c. Professional decision-making competency.

5) New concepts in elementary teacher education should be utilized. These include:

a. Use of new educational technologies such as microteaching.
b. Recognition of the value of staff differentiation.
c. Provision for continuous in-service education.

6) The staffing of teacher education faculties will require teachers capable of assuming new faculty roles. These roles include: administration-student personnel tasks, teaching-counseling tasks, and selecting-producing materials tasks.

These concepts, effectively adapted and implemented can help Shaw University to respond to the educational needs of society.
Section V

PROPOSED CHANGES IN THE UNDERGRADUATE PROGRAM FOR ELEMENTARY TEACHERS

Pre-Service Experience

Laboratory Experiences Prior to Student Teaching

The term "Laboratory Experiences" is used to denote the experiences in which teacher education majors are in direct contact with children and youth in an instructional setting. The trend has been to include more laboratory experiences before the student engages in student teaching.

Prospective teachers in the professional courses should be required to observe students in laboratory situations. Frequently, the student should participate in tutorial experiences to further his understanding of children.

In the psychology courses, students should be required to study individual children and record significant data as well as develop an understanding of the construction and use of sociograms and cumulative record analysis.

In the children's literature course, students should conduct story hours in local situations for children.

In the elementary education courses—language arts, social studies, science methods—individually and in small groups, prospective teachers should frequently observe the respective subject taught by proficient public school teachers, and these students should help prepare and aid in the preparation of materials to be used by the students, and frequently work with a small group.
Professional Laboratory Experiences--Student Teaching

The general purposes and objectives of laboratory experiences, including student teaching, include the following:

1) To provide an opportunity for the student to define his own philosophy of education;

2) To provide for the acquisition of first hand information concerning the principles of growth and development, the various theories of learning and their influence upon the daily experiences of children;

3) To provide an opportunity for student teachers to show proficiency in working with children and youth according to their individual ability levels, interests and needs.

4) To provide an opportunity for the student to demonstrate his understanding of subject matter in his major field and to see the interrelatedness of subject matter;

5) To provide an opportunity for developing a more thorough understanding of the principles of motivating children and youth to learn by putting the principles into practice;

6) To provide a more thorough understanding of the value of good organization and presentation of subject matter materials and acceptable methods of teaching children;

7) To provide an understanding of the necessary administrative control and classroom routine needed for successful teaching; and

8) To provide for the development of skills in the evaluation of educational materials and programs as well as child growth and development through the use of informal and standardized methods.

The pre-service training of teachers is a continuum of clinical and simulated experiences which begin shortly after the teacher education major is identified. Varying levels of responsibility and participation, which provide the basis for the student's teaching experience, are included.
The beginning level contains routine duties that are pertinent to successful teaching. Progressively more intensive pre-professional experiences are reflected by the following levels:

**Level I - Getting Experience In A School Setting**
- Evaluating papers with a key
- Supervising lunchroom, hallways, playground
- Checking and recording attendance
- Assisting with A-V equipment
- Preparing multiple copies of the teacher's material for student

**Level II - Developing Initial Teaching Strategy**
- Tutoring
- Administering tests
- Conducting story hours
- Making instructional bulletin board display
- Supervising study groups
- Presenting pertinent A-V materials to the class

**Level III - Experiencing Small Group Instruction**
- Making a lesson plan to be used with a small group
- Teaching the plan to the group for which it was planned
- Evaluating the progress of the individual members of the group and the group as a whole

**Level IV - Experiencing Total Group Instruction**
- Planning for one area with the total class group
- Teaching the total class group in one area for at least one week using two of three groups
Evaluating progress of the small group, total group and individuals

Level V - Participating as a Member of a Federal Team--Getting Experience in Curriculum Modes of School Inquiry

Analyzing the micro-teaching experiences of peers and self
Analyzing classroom teaching-learning situations
Evaluating classroom effectiveness

Level VI - Student Teaching

Carrying on an instructional program for six weeks or more

If the student is to become a competent teacher, help is required. This model proposes to give this guidance through the program discussed here.

During the student teaching experience, it is desirable that the student teacher:

1. Define his own philosophy of education;
2. Acquire first-hand information concerning the principles of growth and development, the various theories of learning and their influence upon the daily behavior of children and youth;
3. Develop and demonstrate proficiency in instructing children and youth according to their ability levels of interests and needs;
4. Be prepared to make decisions concerning objectives and appropriate learnings to be promoted;
5. Demonstrate his understanding of subject matter in his major field and see the interrelatedness of subject matter;
6. Become proficient in motivating children and youth to learn the desirable content information.
7. Become sensitive to the value of an need for good organization in the presentation of subject matter to a class;

8. Use acceptable methods and procedures in teaching children and youth;

9. Develop and use the necessary administrative controls that are needed for good classroom organization and control;

10. Develop skill in the evaluation of educational materials and programs as well as child growth and development; and

11. Be able to use informal and formal standardized methods of evaluation.

Individual strengths and weaknesses of the trainees vary. It is recommended that a built-in continuous evaluation system be a part of the student teaching program. Supervising teachers and college supervisors should provide a continuing diagnosis of the needs of each trainee and work to meet these needs.

1. Each supervising teacher should submit at least three evaluation reports of the student teacher's progress.

2. Conferences should be held with the principal, the supervising teacher, and the student teacher.

3. Evaluations of the student teaching program should be passed in by student teachers, supervising teachers and the college supervisors. These evaluative statements are compiled and used for program improvement.

In-Service

In-service education is becoming more and more important each day because of the large number of young, inexperienced teachers who enter the teaching profession each year. With all the turmoil in education today, the numerous complex problems having teacher training institutions, the newer trends in mathematics, social studies, science, and foreign languages, and the year-to-year changes in methodology. in-service education is a must, not only for the young, inexperienced teachers, but also for teachers with years of experience.

In the model for teacher education for Shaw University, in addition to the modern in-service complex, a comprehensive pro-
In-service training for today's teachers is a vital necessity because efficiency and proficiency of the modern school program cannot afford to remain static. Based upon educational predictions for the future, teacher training will undergo a multiplicity of changes, and it will be necessary for a public school teacher to be kept up-to-date on the many changes taking place. We offer, therefore, a program whereby our graduates and the graduates from other schools come into the University at certain intervals for refresher courses and up-to-date information on the day-to-day and year-to-year changes. These courses in the various teaching areas are scheduled for late afternoons, early evenings, and Saturday mornings in order to make it convenient for the in-service teachers to keep abreast with the many changes in education and technology. It is the purpose of the department of education at Shaw University to develop an in-service training program relevant to the changing times.

In the future it will be necessary for Shaw University to set up a specially designed center for in-service teachers. This center should be a part of the regular teacher education program; however, it should be under the supervision of a special director who is trained as a teacher, has had experience in the public school system and is aware of the personnel, facilities and supplies necessary for up-dated training of public school teachers. This center would be opened from early afternoon until late evening and on weekends with a specially designed curriculum to keep the public school teacher up-dated.

This center would be housed in the planned education building known as the Educational Learning Center. The faculty would be spacious enough to have specially designed rooms with special equipment for in-service teachers. These rooms would be used for regular students during the school day with the schedule so planned that regular classes would terminate by 4:30 p.m. at the latest to make room for the in-service teachers who would be coming in at that time. The curriculum of the in-service laboratory would be designed to keep the teachers up-to-date on the current happenings in their particular field. This proposed building would have at least three floors and would be spacious enough to accommodate a minimum of 150 in-service teachers. For the convenience of the in-service teachers, particularly the senior teachers, the facilities that would be used most would be located on the ground floor.

The building would be so constructed that the seminar rooms and laboratories would be surrounded by the classrooms, so that any professor wishing to set up seminars or wishing to go into the learning laboratory room would be only steps from either
facility. In this way, it will always be convenient for the professor to set up his experiment, plan his seminars, arrange his seminar tables, etc., for the convenience of the in-service teachers and himself. The final plans for this building would contain the thinking of the school architect, an outside agency experienced in school planning, members of the department of education at Shaw University, the general faculty, public school teachers and administrators, superintendents of schools and representatives from the State Department of School House Planning. In other words, this building would be designed in the best manner to make it possible to serve the entire public school system.

The center would have a full-time staff trained in the public school disciplines. Their main function would be to plan, to design, and to implement a program for in-service teachers. As has been previously mentioned, this center would not be designed exclusively for Shaw University graduates. In addition to those who graduate from Shaw University in teacher education, the center would be open to all teachers in the surrounding areas. This means that all the teachers in commuting distance could come to the University for refresher courses. The center at Shaw University would also contain a media center with a micro-teaching laboratory, a laboratory school, and a complete computerized service. If this computer system would work a financial burden on the University, then we would attempt, through proper channels, to work out a cooperative program with some local university whereby complete programmed and computerized services would be made available to all in-service teachers in the surrounding areas.

The micro-teaching laboratory is located in the Art Theater, which is in the Learning Resources Center. Shaw University does not have a library per se for various reasons. Instead, it has a Learning Resources Center. It is known as a Learning Resources Center because it was felt that Shaw should move away from what has been previously known as the old, traditional library, which contained stacks of books, periodicals, and newspapers. In addition to periodicals, books, and newspapers, the center contains a micro-teaching laboratory, a Dial Access Retrieval system, a Dukane Reader, a radio broadcasting station, and a learning laboratory.

The micro-teaching laboratory contains concord video-tape recorders, a TV monitor, TV cameras, overhead projectors, and standard screens. The micro-teaching laboratory is designed to teach the technical skills of teaching to the students. The principal aim of the micro-teaching laboratory in the model is to provide training for the in-service teachers and to aid in-service teachers in becoming proficient in the component skills of micro-teaching laboratory is to add a minimum of six TV cameras, a 35-
millimeter camera for colored filmstrips, a speed graphic press camera, and several inexpensive cameras with wide angle lenses to be used by the beginning students. As the program expands, additional overhead projectors and screens will be made available.

The Reading Clinic is a part of the Learning Resources Center and houses equipment for approximately 300-400 students. This equipment includes Craig Readers, Rheem Caliphone Consoles, control readers, tachistoscope, and several tape recorders. The primary purpose of the reading program is to help the in-service teachers to develop a program which will enable them to reach a reading level commensurate with their training and intelligence. The program is designed to train the in-service teachers to work with their students in overcoming deficiencies in basic comprehension, faulty word identification, and poor oral reading.

With the new certification requirements in the State of North Carolina in which all in-service teachers are required to return to school at least one time within a 5-year period, the center services a dual purpose; that of upgrading the teacher and at the same time meeting the certification requirements for the state. It is hoped that through some foundation, either private or public funds can be made available to bring many of these in-service teachers in each year without cost to them.

Also, Shaw University envisions a Master's program which will take the teacher beyond the minimum requirements and at the same time offer an advanced degree. In other words, this specially designed center would be a part of an educational complex planned and implemented to upgrade principals, teachers, and non-teaching staff.

Providing a Methodology and Strategy in Teaching

As never before, teacher trainers are faced with the inescapable responsibility of preparing creative teachers who through their competency and adaptability to revolutionary changes will provide the necessary learning experiences for effective citizens. The demands that are placed upon youth and adult citizens are increasing. The skills that are needed for fruitful living are likewise increasing.

The teacher trainers, therefore, must provide those experiences and components for the teacher education trainees that emphasize and promote academic proficiency and personal and professional competence.

Behavior change, self-renewal and competency should very well be those components that would receive priority.
Once it has been accepted that the goal of teaching is to promote learning, it becomes necessary to construct certain guidelines for the teaching and learning experiences that will help prepare teachers for the responsibilities that they will assume in the schools. All valuable instructional techniques and strategies must be employed.

**Methods and Content**

The trainees should develop teaching behavior which is competence-oriented and which comes under the control of complex cognitive structures involved in methods and planning.

Planning for competent teaching demands the organization of information that lessens the complexity of the material by giving it a surrounding cognitive structure. This planning then means that teachers must use those methods that are characterized by discovery.

We speak then of the importance of structuring course content or knowledge so that the student can find meaningful relationship among ideas rather than struggle with facts in isolation. Teachers must be concerned with how the students are gaining proficiency.

Devices must be built in that will arouse motivation and promote a sense of accomplishment. Recapitulation and sufficient transition between topics and units of work must be exercised.

One of the more serious problematic areas in planning and methods is the practice of many teachers of relying upon students to be their own critics. We want students to be productive, imaginative and exploratory. At the same time, we want them to be evaluative and reflective.

We are speaking of those abilities and skills needed to generate new ideas and thought combination and then subject them to an almost simultaneous series of tests and evaluations. Teachers must continually remind themselves that the characteristic of combining these skills demands exceptionally mature and efficient thinking. The emphasis here is that competencies and skills are often in opposition to each other and the behavior tendencies that result therefrom present real and genuine problems for even the more mature students.

Teaching must be geared not simply to the transfer of information nor to the development of insight. Teaching methods must be geared to the development of those competencies that have been identified as those necessary for effective teaching and learning experience in the elementary school. For the goal of teaching is learning.
Our aim in content is to preserve knowledge and foster its
growth. The desired student competence in this regard is for
him to be able to make sense of public knowledge in his own
terms.

**Framework for a Teaching-Learning Unit**

I. Introductory statement
   A. Outline the specific understanding which students
      will develop.
   B. State the specific skills which students will acquire
   C. Outline the specific attitudes which students will
      develop

II. Objectives stated as understandings which students
    will develop.
   A. Outline the major subject matter content, or
   B. Outline the problems to be solved, or
   C. Outline a series of projects to be completed.

III. Content Outline
   A. Outline the major subject matter content, or
   B. Outline the problems to be solved, or
   C. Outline a series of projects to be completed.

IV. Activities in which students will engage
   A. Initiatory activities
      1. Outline a series of activities which will get
         the students off to a successful beginning.
         Indicate the sequence of these activities on
         the basis of your ideas as to how to indicate
         a good teaching-learning situation.
      2. Indicate the time that will probably be re-
         quired for initiating the unit.
   B. Developmental activities
      1. Outline the activities in which the students
         will engage to develop understandings, skills
and attitudes. Indicate sequence in terms of the order in which you think these are learned.

2. Estimate the time needed to carry out this plan.

C. Culminating activities

1. Outline a summarizing activity or group of activities to which each student can contribute, to which the whole group will direct its effort during the major portion of the learning period, which will best satisfy each student's need for approval from classmates and others, and which will promote good attitudes toward classmates, teacher, school.

2. Indicate the estimated length of time necessary for this phase, allowing for appropriate student participation.

V. Materials and resources

A. Locate reading materials, audio-visual materials and demonstration and experimentation materials which are needed to make the activities worthwhile.

B. Locate and outline facilities in the school (outline the classroom and in the community which will be used.)

C. Revise procedures for bringing people from the community to the classroom and for taking the students into the community.

D. When it is necessary for students to make contact with persons outside the classroom or to secure materials, outline the procedures you will use to facilitate these activities.

VI. Evaluate procedures

A. Outline the procedures you will employ to determine where students are when the unit starts.

B. Outline the methods you will use in assisting students to measure their own progress.

C. Outline the procedures you will use to measure student growth in understandings, skills and attitudes during the entire unit.
The big problem in education today is not how to increase the absorption of discrete packages of learning, but how to develop the desire to learn and a sense of commitment to knowing and understanding oneself and relating that self meaningful to American civilization and to the world.

Teacher educators are investigating and evaluating every part of their programs in order to make learning in their campus classrooms more relevant, challenging, and lasting in its effects upon their students' teaching. Shaw University is no exception. Serious consideration has been given to many innovative ideas and proposals. Listed among these are the following, as stated by Dr. David Willis:

1. Having students of teaching become involved earlier and more intensively in every part of the instructional programs of the schools;

2. Study of the teaching act in a wide variety of simulated and actual classroom situations;

3. Sensitivity training;

4. Student teacher analysis of their own behavior in video-taped micro-teaching (micro-training) situations; and

5. Self-instructional systems in which they learn to perform various teaching behaviors according to predetermined performance criteria.

The educational experiences of courses prior to the methods courses must provide for personal growth in a realistic fashion. There must be a shift in emphasis from a curriculum characterized by prescription to one characterized by self-discovery; from one characterized by reliance on external responsibility for growth to one characterized by personal responsibility for growth; and from courses characterized by talking about ideas, values, and qualities through personal involvement in real and open relationships and experiences.

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Area 1 - Subject Matter Competency

One of the major goals of instruction requires that a body of knowledge be transmitted. In order to achieve this objective, subject content knowledge must be assimilated into the teacher's cognitive structure. The traditional method by which the teacher trainee acquires this knowledge has been through formal lecture courses outside the division or school of education. This model suggests that, with effective development of performance criteria, a variety of instructional modes may be utilized to meet the criteria. Subject content knowledge that is central to subject matter competency may be effectively acquired through closed-circuit television broadcasts, programmed instruction, including extensive usage of computer-aided instruction, independent study, and seminars, as well as formal lectures.

Area 2 - Presentation Competency

The possession of adequate subject content knowledge is a necessary but not sufficient condition for effective teaching. The teacher must acquire appropriate behavioral skills in order to translate the subject knowledge into a teachable form. Learning theories have suggested various conditions under which the acquisition of knowledge takes place more effectively. The technical skills approach to teacher training translates these principles of learning into principles of teaching. Examples of technical skills which have already been developed and are particularly relevant to the presentation of subject content include: set induction, closure, clarity of communication, control of participation, reinforcement, repetition, and use of examples.

At least seven components of presentation competency include the following which must be evident in both the faculty and the finished product — the teacher trainee:

1. Specifying learning goals
2. Assessing pupil achievement of learning goals
3. Diagnosing learner characteristics
4. Planning long-term and short-term learning programs and pupils
5. Guiding pupils with their learning tasks
6. Directing off-task pupil behavior
7. Evaluating the learner

Again, we recognize that a variety of possible instructional experiences exist which can provide the teacher trainee with the
necessary mastery in presentation skills. Micro-teaching is a particularly effective technique for this purpose. Alternative experiences include classroom observation, viewing of videotape technology as a means of individualizing instruction. Videotape is used as:

1. A powerful means of providing feedback to teachers on their performance in the micro-teaching and regular classroom setting.
2. A research tool for the analysis of teaching behavior.

Area 3 - Professional Decision-Making Competency

The model presented here presumes that one of the most crucial aspects of teaching is that of professional decision-making. The teacher is the decision-maker in the classroom. In order to meet his instructional objectives, the teacher must utilize knowledge and skills from all three performance areas—subject matter content knowledge, behavioral skills, and humanistic skills. He must decide what material is to be taught, how it should be taught, and what techniques should be employed. He must further consider the very important personal and stylistic variables which might affect the outcomes of instruction.

In addition to possessing skills and knowledge, the teacher trainee must have practice in facing the situations that require these decisions. The kinds of activities which allow for this practice include: classroom simulation experiences that require the teacher to face, analyze, and solve problems similar to those faced in the classroom; microteaching experiences; observational experiences (both live and using videotape); small group work; and student teaching.

COMPETENCIES REQUIRED IN WORKING WITH THE DISADVANTAGED

It is an alarming statement, but it must be noted that despite the tremendous advancement in educational technology over the past two decades, schools have failed miserably in meeting the needs of a large segment of the population, namely, the disadvantaged. There is lamentably little recognition of this crisis in education.

By one report of educational research personnel it has been said: "By all known criteria, the majority of urban and rural slum schools are failures. In neighborhood after neighborhood across the country, more than half of each age group fails to complete high school; and five percent or fewer go on to some form of higher
education. In many schools the average measured I.Q. is under 85, and it drops steadily as the children grow older. Adolescents depart from these schools ill prepared to lead a satisfying, useful life or to participate successfully in the community.

Who are the children so poorly served by the most affluent nation in history? The term "disadvantaged" generally refers to a group of people who differ from each other in a number of ways, but have in common such characteristics as low economic status, low social status, low educational achievement, tenuous or no employment, limited participation in community organizations, and limited potential for upward mobility. Various referred to as the "culturally deprived", the "socio-economically deprived", the "socially and culturally disadvantaged", the chronically poor", the "poverty-stricken", the "culturally alienated", and so forth, these are people who are handicapped by depressed social and economic conditions. In many instances they are further handicapped by ethnic and cultural caste status.

In presenting the goals of the disadvantaged, we should be conscious of the Negro problem. There is a "Negro problem" in the United States and most Americans are aware of it, although it assumes varying forms and intensity in different regions of the country and among diverse groups of the American people. Americans have to react to it, politically as citizens, and when there are Negroes present in the community, privately as neighbors.

To begin with, the Negro is a problem to himself. The contented Negro whose mind is at peace on the race issue, is rare. The Negro protest has been arising for a long time and the recent war has caused an even more rapid increase in the discontent and protest.

The white man worries about the Negro problem too, and not least when he wants to convince himself and others that it is settled for all time. The problem has varying degrees of importance in different regions, depending partly on their historical backgrounds and partly on the number of Negroes in the area. However, even in those Northern states with few Negroes, the Negro problem is always present, though there is little excitement about it. Nearly everybody in America is prepared to discuss the issue, and almost nobody is without opinions on it. Opinions vary. They may be vague and hesitating or even questioning, or they may be hardened and articulate. But few Americans are unaware of the Negro problem.

The American Negro problem is a problem in the heart of the American. It is there that the decisive struggle goes on. This is the central viewpoint of this study. Though our study of the disadvantaged includes economic, social and political race relations, at the bottom the problem is the moral dilemma of the white American--the conflict between his moral values. The American dilemma is the ever-raging conflict between, on one hand, the values of individual and group living, where personal and local interests; economic, social and sexual jealousies; considerations of community prestige and con-
formity; group prejudice against particular persons or types of people, and all sorts of miscellaneous wants, impulses, and habits dominate his outlook.

In light of current assessment of teachers and teacher preparation, and of the education goals for working with the disadvantaged, the following objectives have been identified for Shaw University's teacher education model:

1. To help prospective teachers develop a sensitivity which will enable them to appreciate and understand disadvantage children and youth.

2. To train prospective teachers to respect the potential strengths of the disadvantaged.

3. To train prospective teachers to know how to communicate to broad segments of the society. At present many pupils are victimized because the teacher is unable to speak their language. Teacher preparation must include sensitizing to a variety of legitimate linguistic usages and patterns. A teacher who is ignorant of linguistics is not a good teacher, no matter what his area of competence.

4. To train prospective teachers to make school and scholarship an exciting experience for anyone.

5. To provide prospective teachers with the tools required to help the disadvantaged with self-help and ego-strengthening incentives.

6. To train prospective teachers to be able to help both the advantaged and the disadvantaged to appreciate the importance of democratic institutions.

7. To train prospective teachers to share valuable knowledge and experience. The teacher must show the student that what he has to offer is valuable. Also, the teacher must have that which he is asked to share.

8. To provide prospective teachers with the necessary guidance skills which will enable
them to help the disadvantaged to become more aware of the nature of work and the career choices they may make therein. Career choice is vital for disadvantaged youth.

9. To train prospective teachers to help students to become able to:
   a. Choose, perform, and enjoy a viable vocation,
   b. Exercise the complicated task of democratic citizenship,
   c. Engage in satisfactory inter and intra-personal relationships and
d. Engage in culture-carrying activities.

In the context of these four objectives, the disadvantage can be defined. Everything that is learned in the name of education must be judged by whether there is clearly current or future use of that learning in making choices.

**Teachers Should Be Prepared to Teach and Life in a Multi-Cultural, Multi-Racial, and Multi-Class World.**

Feelings of hopelessness and despair are common. We need teacher education programs today which are truly relevant within the nature of our society from which they take their meaning and in which we make our commitments to freedom, individualism, and rationality. A relevant teacher education program in the 1970's should not only prepare teachers to be effective in the 1970's but also in the 1980's. Teachers should be innovators—to produce and accommodate new ideas, to change when community needs and children change.

We need to move away from the single-dimensional to the multi-dimensional teacher. Not only must the teacher be multi-dimensional in the types of growth he seeks to promote, but he must have vertical dimensions in that he sees himself as having responsibility for working with any child at his own achievement level and taking him as far as he can along the continuum of each type of growth.

To adequately meet this multi-dimensional task in teaching, a teacher must have those competencies which include:

1. The ability to relate to the learning of a student; this includes diagnosis and individual instruction. The teacher must be trained to be an educational diagnostician;
2. The ability to analyze group development and interaction and perform a leadership role in a group;

3. The ability to communicate fluently both with individuals and groups;

4. The possession of a body of specialized skills and knowledge essential to the performance of his job.

5. The ability to structure and restructure knowledge. This competency will enable the teacher to choose from his specialization the type of knowledge that is important to a given individual or group and to restructure it so that the individual or group may investigate the knowledge in terms of its own motivation.

If these are the kinds of competencies we want teachers to develop in this training model at Shaw University, we should declare this fact to the University-wide community of students, faculty and staff. Anyone who selects the Shaw University product should expect to obtain a teacher with these competencies.
Section VI

THE MASTER'S PROGRAM
IN ELEMENTARY EDUCATION

The development of a Master's Program in Elementary Education was seriously considered and undertaken. Its need as an integral part of the Shaw University Teacher Education Program has been recognized by both administrators and faculty particularly if Shaw is to provide the necessary and beneficial services to society that are needed in the areas of education.

In response to that need a master's Model Program was designed.

Design

Shaw University's Master's will begin its first year of operation as soon as funds are available. When established (with foundation aid), the program will be open to college graduates desiring a program of teacher education for the elementary school.

The Plan

Master's Program = The Student + Cooperating School + Liberal Arts College

The Plan as a whole is designed to bring together the undergraduate college student of Shaw University, selected cooperating schools and the Master's Program in a joint venture to prepare the student for effective teaching. Each element has significant responsibilities, each must understand the role of the other, and each must realize that none can do the task alone.

The Liberal Arts College prepares the student in various subject matter areas, with emphasis on his chosen area. The Teacher Education division provides wide experiences, and professional courses. The cooperating extra-classroom activities provide the student with clinical experiences.

The philosophy of the Master's Program in Elementary Education is reflected in the courses to be offered. These are listed in the following sections.
Guidelines for M.A. Degree in Elementary Education

Guideline 1: The program should broaden the teacher's understanding of the purpose and role of the elementary school. Appropriate courses:

Ed. 511 - Introduction to Education
Ed. 518 - Cultural Constraints in Educational Development
Ed. 520 - Schools and Schooling in Cross-Cultural Perspective
Ed. 527 - Contemporary Educational Issues
Ed. 528 - Parent-School-Community Relations

Guideline 2: The program should extend the teacher's understanding of the nature of the learner and learning process. Appropriate courses:

Ed. 516 - Learning Theories and Patterns
Ed. 519 - Child Study and Guidance in the Classroom
Ed. 522 - The Educational Diagnostician
Ed. 523 - The Psychology and Education of Exceptional Children and Youth
Ed. 524 - Teaching and Disadvantaged

Guideline 3: The program should assist the teacher in gaining greater insights and skills in the use of the techniques of research and in designing and carrying out research projects. Appropriate courses:

Ed. 525 - Curriculum Development and Education Innovation
Ed. 529 - Educational Research

Guideline 4: The program should extend and deepen the teacher's ability to work effectively with the content areas of the elementary school curriculum. Appropriate courses:

Ed. 517 - Innovations in Instructional Technology
Guideline 5: The program should provide for concentrated study in one or more of the instructional areas of the elementary school curriculum. Appropriate courses:

A. Ed. 512 - Seminar in Communication Skills
   Ed. 513 - Seminar in Social Studies Education
   Ed. 514 - Seminar in Science Education
   Ed. 515 - Seminar in Mathematics Education
   Ed. 530 - Elementary School Practicum: Art, Music, Physical Education

B. Or five elective courses in a subject matter area (appropriate to the elementary school curriculum) for concentrated study.
Conclusions

1. Courses in Phases I and II should be examined to determine their feasibility and relevance in the education department.

2. Professional courses should be studied to determine if all the needs of prospective teachers are met.

3. Behavioral goals are important to program planning and program development.

   Program planning is at its best when students participate and become involved in program development; however, mastery and proficiency at each stage is a demand if effectiveness is to be assured.

   Program development is at its best when trainees are not slaves to traditional mores.

4. Some type of screening program for applicants is necessary. Data and other results from a screening device should reveal aptitude for teaching and interest in the field of education.

   Self-adjustment on the part of students admitted to the program is necessary for educational maturity. Guidance services geared to self-adjustment will insure educational maturity.

5. Individualized instruction is also pertinent to program planning and program development. Individualized instruction enables a student to become an independent partner in program planning and development. Individualized instruction must make for program evaluation which makes program planning continuous in nature.

6. A good teacher education program must contain the following competencies: evaluation of learning goals, a knowledge of pupil achievement levels, and understanding of the learner's characteristics, long- and short-range planning techniques and self-development techniques.
TABLE I

A SURVEY OF LIKES AND DISLIKES OF JUNIOR HIGH SCHOOL STUDENTS IN SCHOOL A AND SCHOOL B CONCERNING HEALTH AND PHYSICAL EDUCATION

<table>
<thead>
<tr>
<th></th>
<th>I like it</th>
<th>I do not like it</th>
<th>It makes no difference</th>
<th>No responses</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you like films, charts and such as a way to learn about health and physical education</td>
<td>42</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>48</td>
</tr>
<tr>
<td>2. How do you like the inspection period (that is someone taking a check on you each morning)?</td>
<td>3</td>
<td>19</td>
<td>27</td>
<td>1</td>
<td>49</td>
</tr>
<tr>
<td>3. How about sex education in the class?</td>
<td>35</td>
<td>2</td>
<td>12</td>
<td>1</td>
<td>49</td>
</tr>
<tr>
<td>4. How about creative dancing?</td>
<td>23</td>
<td>10</td>
<td>16</td>
<td>1</td>
<td>49</td>
</tr>
<tr>
<td>5. How about games with a large number of classmates?</td>
<td>28</td>
<td>13</td>
<td>8</td>
<td>1</td>
<td>49</td>
</tr>
<tr>
<td>6. Games with a few classmates?</td>
<td>31</td>
<td>5</td>
<td>13</td>
<td>1</td>
<td>49</td>
</tr>
<tr>
<td>7. Any other thing you would like to say about this subject.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE II

A SURVEY OF LIKES AND DISLIKES OF JUNIOR HIGH SCHOOL STUDENTS
IN SCHOOL A AND SCHOOL B CONCERNING
ART AND MUSIC

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>No response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you like your Art period?</td>
<td>41</td>
<td>9</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>2. Do you like music period?</td>
<td>34</td>
<td>14</td>
<td>2</td>
<td>48</td>
</tr>
<tr>
<td>3. Do you enjoy singing in class?</td>
<td>25</td>
<td>24</td>
<td>1</td>
<td>49</td>
</tr>
<tr>
<td>4. Have your music lessons in class been a help to you?</td>
<td>17</td>
<td>30</td>
<td>3</td>
<td>47</td>
</tr>
<tr>
<td>5. Do you enjoy drawing and sketching in class?</td>
<td>44</td>
<td>5</td>
<td>1</td>
<td>49</td>
</tr>
<tr>
<td>6. Can you play an instrument?</td>
<td>24</td>
<td>25</td>
<td>1</td>
<td>49</td>
</tr>
<tr>
<td>7. Would you like to play an instrument?</td>
<td>32</td>
<td>15</td>
<td>3</td>
<td>47</td>
</tr>
<tr>
<td>8. Any other thing you would like to say about this subject.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE III
A SURVEY OF LIKES AND DISLIKES OF JUNIOR HIGH SCHOOL STUDENTS
IN SCHOOL A AND SCHOOL B CONCERNING
LANGUAGE ARTS

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you enjoy your reading period?</td>
<td>43</td>
<td>7</td>
</tr>
<tr>
<td>2. Do you enjoy your Language period?</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>3. Do you enjoy reading stories?</td>
<td>48</td>
<td>2</td>
</tr>
<tr>
<td>4. Do you enjoy reading animal stories?</td>
<td>31</td>
<td>19</td>
</tr>
<tr>
<td>5. Do you enjoy reading adventure stories?</td>
<td>48</td>
<td>2</td>
</tr>
<tr>
<td>6. Do you enjoy reading stories that involve science?</td>
<td>22</td>
<td>28</td>
</tr>
<tr>
<td>7. Do you enjoy reading about stories of great people?</td>
<td>28</td>
<td>22</td>
</tr>
<tr>
<td>8. Do you like stories about fairy tales?</td>
<td>17</td>
<td>34</td>
</tr>
<tr>
<td>9. Do you enjoy writing?</td>
<td>41</td>
<td>9</td>
</tr>
<tr>
<td>10. Do you enjoy writing letters?</td>
<td>21</td>
<td>30</td>
</tr>
<tr>
<td>11. Do you like to write stories you make up?</td>
<td>26</td>
<td>22</td>
</tr>
<tr>
<td>12. Do you like your spelling period?</td>
<td>28</td>
<td>22</td>
</tr>
<tr>
<td>13. Do you like spelling drills like spelling bees?</td>
<td>43</td>
<td>7</td>
</tr>
</tbody>
</table>

14. Any other thing you would like to say about this subject.
   Reading is one of my most helpful subjects it relaxes me and clears my mind if I'm mixed up.
TABLE IV
A SURVEY OF LIKES AND DISLIKES OF JUNIOR HIGH SCHOOL STUDENTS IN SCHOOL A AND SCHOOL B CONCERNING MATHEMATICS

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you like your mathematics period?</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>2. Do you enjoy mathematics?</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>3. Do you think your mathematics text is too hard?</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>4. Do you like worded problems in which you must do a lot of thinking to solve the problem?</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>5. Do you prefer drill problems better than problems with no words?</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>6. Do you know the difference between old mathematics and modern mathematics?</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>7. If your answer is yes, which do you like better?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Do you like to compete with others in mathematics classes?</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>9. Is the mathematics class dull to you?</td>
<td>5</td>
<td>14</td>
</tr>
</tbody>
</table>

10. Any other thing you would like to say about this subject. 46 45
### TABLE IVa

A SURVEY OF LIKES AND DISLIKES OF JUNIOR HIGH SCHOOL STUDENTS IN SCHOOL A AND SCHOOL B CONCERNING MATHEMATICS

<table>
<thead>
<tr>
<th></th>
<th>I like it</th>
<th>I do not like it</th>
<th>It makes no difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How about mathematics from the primary grades up to now?</td>
<td>29</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>2. How about your home work in mathematics?</td>
<td>16</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>3. How about modern mathematics problems?</td>
<td>20</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>4. How about the way your teacher presents problems?</td>
<td>26</td>
<td>16</td>
<td>7</td>
</tr>
</tbody>
</table>

5. Any other thing you would like to say about this subject.
TABLE V

A SURVEY OF LIKES AND DISLIKES OF JUNIOR HIGH SCHOOL STUDENTS IN SCHOOL A AND SCHOOL B CONCERNING SCIENCE

Please check yes or no

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have a pet at home?</td>
<td>40</td>
<td>9</td>
</tr>
<tr>
<td>If answer is no, would you like to have one?</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>If your answer is no, would you enjoy working with a class pet?</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Have you ever studied animals in school?</td>
<td>46</td>
<td>3</td>
</tr>
<tr>
<td>If answer is yes, did you like the experience?</td>
<td>40</td>
<td>6</td>
</tr>
<tr>
<td>If answer is no, would you like to join a group that would study animals?</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Do you understand any of these terms?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Compounds</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>b. Elements</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>c. Parts of Water</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>d. Humidity</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>e. The making of rain</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>f. The making of snow</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>g. Formation of fuel</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Do you enjoy studying about the information in item 7?</td>
<td>23</td>
<td>26</td>
</tr>
<tr>
<td>Do you enjoy working with plants?</td>
<td>33</td>
<td>14</td>
</tr>
<tr>
<td>Do you like science experiments?</td>
<td>39</td>
<td>10</td>
</tr>
</tbody>
</table>
TABLE Va
A SURVEY OF LIKES AND DISLIKES OF JUNIOR HIGH SCHOOL STUDENTS
IN SCHOOL A AND SCHOOL B CONCERNING
SCIENCE

<table>
<thead>
<tr>
<th></th>
<th>I like it very much</th>
<th>I like it</th>
<th>I do not like it</th>
<th>It makes no difference</th>
<th>I have not had the experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How do you like your science period?</td>
<td>15</td>
<td>14</td>
<td>11</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>2. How do you like your science text book?</td>
<td>6</td>
<td>23</td>
<td>11</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>3. How do you like to work with science equipment (apparatus)</td>
<td>19</td>
<td>16</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4. How do you like to make science field trips?</td>
<td>34</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>5. How do you like to work with animals?</td>
<td>27</td>
<td>17</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>6. How would you like to watch plants grow?</td>
<td>12</td>
<td>22</td>
<td>8</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>7. Science activities</td>
<td>18</td>
<td>19</td>
<td>1</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>8. Planning the program</td>
<td>12</td>
<td>16</td>
<td>6</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>9. Participation</td>
<td>20</td>
<td>21</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>

10. Any other thing you would like to say about this subject.
# TABLE Vb

A SURVEY OF LIKES AND DISLIKES OF JUNIOR HIGH SCHOOL STUDENTS IN SCHOOL A AND SCHOOL B CONCERNING SCIENCE

Please check the ones that are more in keeping with your thinking.

<table>
<thead>
<tr>
<th></th>
<th>I believe</th>
<th>I do not believe</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bad luck</td>
<td>22</td>
<td>20</td>
<td>7</td>
</tr>
<tr>
<td>2. Good luck</td>
<td>28</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>3. A broken mirror will bring bad luck</td>
<td>4</td>
<td>42</td>
<td>0</td>
</tr>
<tr>
<td>4. Thunderstorm will sour milk</td>
<td>0</td>
<td>47</td>
<td>2</td>
</tr>
<tr>
<td>5. Some other superstitious ideas</td>
<td>12</td>
<td>30</td>
<td>6</td>
</tr>
<tr>
<td>6. Black cat</td>
<td>8</td>
<td>39</td>
<td>2</td>
</tr>
</tbody>
</table>

7. Any other thing you would like to say about this subject.
<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you enjoy history?</td>
<td>36</td>
<td>14</td>
</tr>
<tr>
<td>2. Do you enjoy geography?</td>
<td>26</td>
<td>23</td>
</tr>
<tr>
<td>3. Do you like civics?</td>
<td>21</td>
<td>28</td>
</tr>
<tr>
<td>4. Do you like to study the life of great people?</td>
<td>34</td>
<td>15</td>
</tr>
<tr>
<td>5. Do you like to study about citizenship?</td>
<td>28</td>
<td>22</td>
</tr>
<tr>
<td>6. Do you know much about your government?</td>
<td>30</td>
<td>19</td>
</tr>
<tr>
<td>7. Would you like to help plan your lessons?</td>
<td>40</td>
<td>8</td>
</tr>
<tr>
<td>8. Would you enjoy cooperating with your classmates in planning and working in class?</td>
<td>49</td>
<td>1</td>
</tr>
<tr>
<td>9. Do you understand a road map?</td>
<td>45</td>
<td>4</td>
</tr>
<tr>
<td>10. Do you understand a political map?</td>
<td>33</td>
<td>15</td>
</tr>
<tr>
<td>11. Do you understand a physical map?</td>
<td>42</td>
<td>7</td>
</tr>
</tbody>
</table>

12. Any other thing you would like to say about this subject.
### TABLE VIa
A SURVEY OF LIKES AND DISLIKES OF JUNIOR HIGH SCHOOL STUDENTS IN SCHOOL A AND SCHOOL B CONCERNING SOCIAL STUDIES

<table>
<thead>
<tr>
<th></th>
<th>I like it</th>
<th>I do not like it</th>
<th>It makes no difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How do you like your History period?</td>
<td>33</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>3. How do you like your other History books?</td>
<td>20</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>4. If you have a Geography text book, how do you like it?</td>
<td>1</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>5. Do you enjoy studying about your government?</td>
<td>22</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>6. How do you like the new State House?</td>
<td>31</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>7. Social Studies Activities</td>
<td>37</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>8. What would you like to add or subtract from the Social Studies (History) Program? Select one and comment.</td>
<td>19</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>9. Planning the Program</td>
<td>31</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>10. Participation</td>
<td>40</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

11. Any other thing you would like to say about this subject.
SUMMARY AND INTERPRETATION OF TABLES

The following summaries are significant:

1. Junior high school students in project schools expressed a strong liking for films and charts as learning media in health and physical education. There was a strong dislike for the traditional inspection period in which students make daily health checks.

   Sex education and creative dancing were highly favored as an addition to the regular program of health and physical education.

   Students favored games of low organization and games of high organization as a part of their physical and health education program.

2. The vast majority liked the music and art period. One half of the students do not like singing in class. The majority of the class liked instrumentation and most of them could play some kind of instrument.

   The vast majority of students enjoyed drawing and sketching.

3. Although most of the students enjoyed the Language Arts Program in general, a sizeable number did express a dislike for the reading of animal stories, stories that involve science, the writing of letters and the reading of fairy tales. The reading of fairy tales received the greatest number of negative responses. A sizeable number expressed a dislike for writing make-up stories. The majority of students expressed a dislike for the spelling period, however, the vast majority said that they do like spelling drills like "spelling bees."

4. Although most students expressed a liking for mathematics they did, however, say that their textbooks were too hard. They expressed a dislike for wordy problems and instead they preferred drill problems.

5. There is no appreciable difference between the number of students who dislike and like homework. The vast majority of students liked modern mathematics.

6. The vast majority of students expressed a liking for animals and enjoyed studying and working with animals. Similarly, the vast majority enjoyed working with plants. Most of the students expressed a like for science experiments. They seemed to understand the common terms used in science vocabulary.

7. The vast majority of students expressed a liking for science period, science text, science equipment, field trips, science activities and program planning.

8. There was no appreciable difference between the number of students who did not believe in bad luck and those who did believe in bad luck.
9. There is no appreciable difference between those students who expressed a like and those students who expressed a dislike for social studies. The majority of students did not like civics, but they liked to study the lives of great people. A sizeable number indicated that they did not know about their government. Most of the students enjoy pupil-teacher planning. Map-reading seems to be understood by most students.

10. Most of the students expressed a like for history period, history textbook, and other history material. A majority of students expressed a dislike for teaching methods. Some said "I really hate history."

CONCLUSION

The following conclusions are presented:

1. Students rebel against traditional teaching methods and techniques. They prefer innovative methods as techniques. Students desire a diversified program in physical education.

2. There seems to be very little motivational technique employed in the teaching of singing during the music period. There seems to be a need for a broader scope in the fine arts program.

3. The program structure in the Language Arts program does not seem to meet the total needs of students. The Language Arts program with respect to stories seems to be traditional. The methods used in teaching spelling are not accepted by the students with one exception: the spelling bee technique.

4. The techniques of teaching mathematics do not seem to involve concrete approaches to the teaching of mathematics.

5. That the science program seems to be meeting the science needs of students is perhaps because the methods and techniques are experimental in nature.

6. In the social studies area it seems that the teaching of civics is more textbookish in nature and does not involve enough innovation.

7. Students seem to abhor the teaching methods and techniques employed by the teachers of history.
RECOMMENDATIONS

The following recommendations are herewith presented:

1. That the teacher of physical education and health consider a study of new techniques and methods for teaching physical education based on meeting the health needs of students.

2. That teacher workshops be set up in fine arts for the purpose of increasing the scope of the program and improving the techniques of teaching. That personnel from the fine arts department of the State Department of Public Instruction be employed as consultants. Further that music and art be integrated into content subject matter areas of learning.

3. That a study be made of new textbooks and supplementary books with stories whose plots are geared to the experiences of students in our modern society. That faculty workshops in the teaching of spelling be set up that will tend to improve teaching techniques.

4. That a workshop in the use of concrete material for mathematics be established. That a study be made of the present practice in the teaching of modern mathematics to determine its effectiveness.

5. That more field trips designed to help students to understand local, state, and national government be made. That innovative classroom experiences be a part of teaching techniques for civics and history.
REPORT ON S.R.A. TEST SERIES DATA

INTRODUCTION

We realized in the beginning that test data considered alone was just a number and as vague in meaning as a word read out of context. We were also conscious of the fact that the context of scores is made up of such information as the curriculum, equipment, students' educational history, abilities, environment, instructional procedures and, in general, the educational philosophy of the school.

The major purposes of the S.R.A. Tests and the testing program were:

1. To enable teachers and counselors to keep intimately and reliably informed of the educational development of each student.

2. To provide an objective and comprehensive description of the educational development of groups of students.

3. To provide a means for curriculum evaluation and planning.

The entire battery series was not utilized in our program at the two schools in our project. The multilevel series was used which embraced grades 4 through 9. The norms on this battery extended from grade 3 through 12 levels.1

The S.R.A. Achievement Tests were administered in November and March to determine if and to what extent progress was achieved during the interim.

1How To Use Test Results, Multilevel Edition, Form C and D, SRA (Chicago, 1964), p. 2.
INTERPRETATION OF TABLES

In interpreting test results, we were concerned with the many variables that may make hard and fast conclusions invalid.

In interpreting the tables in this report we tended to compare the test norms from the November setting with those of the March setting. Some of the students who participated in the November setting might present a different emotional situation during the March setting. Some of the students who participated in the November session might not have been present in the March session.

We realized, as we have always in a standardized testing program, that norms are comparisons with the performance of national sample of students tested in the standardized program. Shaw University's education department regards norms only as a point of departure in assessing whether goals appropriate to the situation are being met. In evaluating these goals we show what the student is capable of doing. For example, an average ranking may be commendable for one student, yet represent only mediocre performance for a more capable classmate.

Another possible variable that we should consider as we interpret these norms is the possibility of difference between the curriculum emphasis or sequence between the two schools in our study and schools used in standardizing the test. We know that in science and social studies there is less unanimity in the curriculum of various grade levels than in other areas. It was hoped then that the faculty of the two schools in our study would examine the content covered by the test in relation to the school curriculum before deciding whether a given result of a group represents good or poor performance. This was the crux of the entire testing program, for we think administering test and putting the results away is a waste of time and money.

It should be emphatically noted here that there is a grave danger of a type of an interpretation in which the faculty laments, or rejoices, in the test results to the extent that they proceed to teach the test or teach in order for students to rate higher on certain tests. In this case, the goals and philosophy of the school are narrow and the whole-child concept is sacrificed to the desire of having "walking encyclopedias" with little else accomplished.

Table VII represents a test data in average achievement in Social Studies and Science of the two schools in question. It should be noted that the eighth grade in School A made much
more of a significant growth in Social Studies than the seventh grade. In science, the growth status was not quite as sharp. Table I also reveals that there was a sharp decline in the second semester of the seventh grade in science. The eighth grade in School B indicated a slight increase in Science and Social Studies. The system in the eighth grade (combination of the two schools) represented a sharp increase in Science and Social Studies. A striking feature of Table VII is the decrease in growth status in the seventh grade in social studies and science in both schools. There was a sharper decline in science in both schools.

Table VIII presents a general increase in all categories of the Language Arts program at both schools. The eighth grade exhibits a sharper increase at both schools than the seventh grade. Spelling in the seventh grade stands out more forcefully than the two categories in the seventh grade. At the same time spelling in the eighth grade also stands out. It should be noted that the category of capital letters and punctuation stand way out front from the other categories in School A in both grades. However, grammar usage indicated a growth that rated lower than the other categories.

It should be pointed out that for the total system the average grade placement for all categories was above the eighth grade level.

In Table IX there was a sharper increase in reasoning than in any other category. There was an increase in growth status in the system in the area of concepts in the seventh grade; however, School B showed little or no growth.

The eighth grade showed a sharper increase in growth status in the system than the seventh grade. It is noticeable that computation in both grades showed a lesser increase in growth status.

It should be noted that in Table X, the seventh grade exhibited a greater decline in both categories in the system* than the eighth grade. In the eighth grade, the increase in

---

*Both project schools.
TABLE VII

THE AVERAGE ACHIEVEMENT OF TEST DATA WITH DIFFERENCES IN GRADE PLACEMENT FOR SOCIAL STUDIES AND SCIENCE IN SCHOOLS A and B
THE SYSTEM OF THE SRA ACHIEVEMENT SERIES FOR NOVEMBER AND MARCH

<table>
<thead>
<tr>
<th>SOCIAL STUDIES</th>
<th>SCIENCE</th>
</tr>
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<td>GRADE</td>
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<td>8</td>
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</tr>
<tr>
<td><strong>School B</strong></td>
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</tr>
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<td>7</td>
<td>8.2</td>
</tr>
<tr>
<td>8</td>
<td>7.9</td>
</tr>
<tr>
<td><strong>System</strong></td>
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</tr>
<tr>
<td>7</td>
<td>8.7</td>
</tr>
<tr>
<td>8</td>
<td>8.3</td>
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*GROWTH STATUS*
A COMPARATIVE ANALYSIS REFLECTING GROWTH STATUS OF THE SEVENTH AND EIGHTH GRADES IN ACHIEVEMENT SERIES CURRICULUM IN NOVEMBER 1970 AND MARCH 1971 TEST SETTING

<table>
<thead>
<tr>
<th>Subject</th>
<th>7th Gr. November</th>
<th>7th Gr. March</th>
<th>8th Gr. November</th>
<th>8th Gr. March</th>
</tr>
</thead>
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<td>11.0</td>
<td>11.0</td>
<td>11.0</td>
</tr>
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<td>Science</td>
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<td>8.0</td>
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</tr>
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<td>4.0</td>
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In November 1970 and March 1971, grades in school A of the SRA Achievement Series Curriculum were compared between the seventh and eighth grades.
<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>SCHOOL A</th>
<th></th>
<th>SCHOOL B</th>
<th></th>
<th>PROJECT DATA</th>
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</thead>
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<td>Grade Placement</td>
<td>Grade</td>
<td>Grade Placement</td>
<td>Grade</td>
</tr>
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<td></td>
<td>Grade</td>
<td>March</td>
<td>Grade</td>
<td>March</td>
<td>March</td>
</tr>
<tr>
<td>Cap and Punc</td>
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<td>Grade 7</td>
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<tr>
<td></td>
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<td>+ .4</td>
<td>ment</td>
<td>+ .3</td>
<td>ment</td>
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<tr>
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<td></td>
<td>March</td>
<td></td>
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<td>Grade 7.8</td>
<td>7.9</td>
<td>Grade 8.6</td>
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<td>Place-</td>
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<td>Place-</td>
<td>+ .1</td>
<td>Place-</td>
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<td>Nov.</td>
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<td>Grade 8.9</td>
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<td>Place-</td>
<td>+ .2</td>
<td>Place-</td>
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<td>Nov.</td>
<td></td>
<td>March</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cap and Punc</td>
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<td>Grade 8.7</td>
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<td>Nov.</td>
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<td>March</td>
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<td>Nov.</td>
<td></td>
<td>March</td>
<td></td>
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<td>Grade 9.2</td>
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<td>Nov.</td>
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<td>March</td>
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<td>ment</td>
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</tr>
<tr>
<td></td>
<td>Nov.</td>
<td></td>
<td>March</td>
<td></td>
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* Growth Status
A COMPARATIVE ANALYSIS REFLECTING GROWTH STATUS OF THE SEVENTH AND EIGHTH GRADES IN SCHOOL B OF THE SRA ACHIEVEMENT SERIES CURRICULUM IN NOVEMBER 1970 AND MARCH 1971 TEST SETTING
### TABLE IX
THE AVERAGE ACHIEVEMENT OF TEST DATA WITH DIFFERENCES IN GRADE PLACEMENT
FOR ARITHMETIC AND ITS COMPONENTS IN SCHOOLS A AND B OF
SRA ACHIEVEMENT SERIES FOR NOVEMBER AND MARCH

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<th>CATEGORIES</th>
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<th>SCHOOL B</th>
<th>PROJECT DATA</th>
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<td>Grade Placement March</td>
<td>Grade Placement Nov.</td>
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</tr>
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<td>8.4</td>
<td>+.3</td>
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<td>8.6</td>
<td>+.2</td>
</tr>
<tr>
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<td>9.7</td>
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<td>Concepts</td>
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<td>+.4</td>
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* Growth Status

<table>
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<th>March Gr.</th>
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</thead>
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<tr>
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<td>11.0</td>
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### TABLE IX A

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<th>March Gr.</th>
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<td>5.8</td>
<td>6.0</td>
</tr>
<tr>
<td>II Data</td>
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<td>8.8</td>
<td>9.0</td>
</tr>
<tr>
<td>Proj. Data</td>
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<td>10.8</td>
<td>11.0</td>
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### TABLE IX B

<table>
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<th>March Gr.</th>
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<td>Proj. Social</td>
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<td>5.8</td>
<td>6.0</td>
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<td>II Data</td>
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<td>SCHOOL B</td>
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<tr>
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<tr>
<td></td>
<td>Placement</td>
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<td>Placement</td>
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<td>March</td>
<td>Nov.</td>
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<td>9.6</td>
<td>+.4</td>
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<td></td>
</tr>
<tr>
<td>Comprehension</td>
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<td>9.7</td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td>Vocabulary</td>
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<td>9.9</td>
<td>+.2</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>TOTAL READING</td>
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<td>9.9</td>
<td>+.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td>Composite</td>
<td>9.3</td>
<td>9.9</td>
<td>+.6</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Growth Status
growth status in both categories was the same. Of the two categories, vocabulary showed a greater weakness.

A glance at Table VII A indicates vividly the decided increase of growth status in the Language Arts program at School A. In Table VII A the increase in growth status is not as sharp and it denotes some decline, especially in the arithmetic area. Table IX A reveals an increase in March with the eighth grade standing out strikingly.

ITEM ANALYSIS STUDY
SRA ACHIEVEMENT SERIES

Earlier in this chapter it was pointed out that teachers in forming judgments as a result of standardized test data should first examine the content of the test and compare it with curriculum content of the school in question. A teacher should also examine the philosophy of the school and consider his own philosophy of education before making judgments.

We are concerned at this point with how to use the S.R.A. Achievement Series in teaching and learning situations.

In order to reap the most benefits from the series, tests should be administered twice per year using different forms. One setting should be in the fall and one in the spring. After studying the difference between grade placement levels which is the growth status as exhibited in Tables I through IV, a teacher will get some idea of the status of her class with respect to curriculum items of the series. Therefore, a teacher's judgment should be based on these variables.

Another step is to compare curriculum items of the series with curriculum of the grade under study. If the two curricula are in harmony, remedial programs may be considered if test data so signifies.

A look at Tables VII through X reveal that students' achievement levels based on this series, form C and D, rank from one to two years above the national norm.

A teacher, as indicated earlier in this report, should not rejoice necessarily but rather study closely the section of the Series titles "Item Analysis." This section is designed to compare the number of responses that are correct in each item with the number of students taking the test during
The standardization of the series. In other words, a percent of responses in the group is compared with a percent of responses in the national group.

In Table XI one item description is taken from the Social Studies section of "Item Analysis." Table XI reveals that in Place Geography, item number ID, twenty-four responded correctly to this item. Reading across that represented 86% (24 out of 28) of the group selecting correct alternatives and 85% of the national group selecting correct alternatives. This means that in this one item the class group in School B ranked higher than the national group.

It should be noted in Table XII, which has to do with Language Arts (punctuation), the school group ranked 100% in item 42B, while the national group ranked 91%.

In Table XIII (Language Arts) it should be noted that the school group ranked 04% in item 4B and the national group ranked 20%. In this case a teacher perhaps would like to examine this item for remedial purposes. If he desires to do this he should note first that item 4B has to do with recognizing improper nouns in general. The next step is to refer to Multilevel Edition Form C of the S.R.A. Achievement Series item 4B on page 32 and study the content. This item has to do with setting off one part of a sentence with a comma. It points up then that this class in School B needs remedial training in setting off parts of a sentence with a comma.

The teacher may like to compare this item which deals with the use of the comma with this section of the Language Arts textbook used by the class. If the phrase in question is in harmony with school curriculum the use of this phase of the series is valid.

SUMMARY

1. The eighth grade in both schools made a more significant growth in science and social studies than the seventh grade in both schools. There was a sharp decline in growth status in science in both schools in the seventh grade.

2. The Language Arts program at both schools showed a definite increase in growth status. The eighth grade exhibited a sharper increase in growth status in both schools than the seventh; however, spelling in the seventh grade showed a sharper increase than any other category in the seventh
<table>
<thead>
<tr>
<th>Item Description</th>
<th>Correct Response</th>
<th>No. in Group</th>
<th>Group %</th>
<th>National %</th>
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</table>

S.R.A. Achievement Series Item Analysis, page 1

Grade 8

A Sample Social Studies Items Analysis

Table XI
TABLE XII
A SAMPLE LANGUAGE ARTS ITEM ANALYSIS
OF S.R.A. ACHIEVEMENT SERIES

<table>
<thead>
<tr>
<th>Grade 8</th>
<th>Sem</th>
<th>Form</th>
<th>No. in Group</th>
<th>Item Description</th>
<th>Item No.</th>
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<th>Number Responding Correctly</th>
<th>Selecting Correct Alternative</th>
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<th>National %</th>
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<td></td>
<td>1</td>
<td>C</td>
<td>26</td>
<td>Periods After Declarative Sentences</td>
<td>18</td>
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<td>24</td>
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<td>28</td>
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S.R.A. Achievement Series
Item Analysis, page 3

69
<table>
<thead>
<tr>
<th>Item Description</th>
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<tr>
<td>Item No.</td>
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grade. The same is true at the eighth grade in both schools. Grammar usage ranked lower than any category in both schools. The average grade placement in Language Arts in both schools is above the national norm.

3. In arithmetic there was a sharper increase in growth status in reasoning in the eighth grade in School A than in any other category. The system showed an increase in growth status in concepts in the seventh grade in School A and no growth in the same category in School B.

4. In reading the seventh grade showed a greater weakness than the eighth grade in both schools. The category vocabulary showed a greater weakness in both grades and in both schools.

CONCLUSIONS

1. The science program for the seventh grade in both schools does not lend itself to growth according to the S.R.A. Series, as well as the science program in the eighth grade in both schools. The social studies program in both schools seems to be in harmony with the social studies curriculum of the S.R.A. Series.

2. The Language Arts program in the eighth grade at both schools is more in harmony with the Language Arts curriculum of the S.R.A. Series than the seventh grade curriculum in both schools. The teaching-learning activities in both schools and in both grades are superior to the teaching-learning activities in the other language arts categories stated in the S.R.A. Series. It is quite evident that the teaching-learning activities in the seventh grade grammar usage category are inferior to the other language arts categories in the S.R.A. Series in both schools.

3. The category reasoning in arithmetic in the eighth grade in School A is in much harmony with that category in the S.R.A. It appears that the category concepts in the seventh grade in School B are not as much in harmony with the same category in the S.R.A. Series as is the seventh grade in School A. Seemingly, the seventh grade curriculum in both schools, is less in harmony with the S.R.A. Series than the eighth grade curriculum in both schools.
4. The reading program in the categories in question is less in harmony with S.R.A. reading curricula in the same category than in the eighth grade in both schools. The teaching-learning activities in vocabulary seem to be weak in both grades and both schools according to the S.R.A. Series.

The following recommendations are herewith presented:

1. That a comparative study be made of both the S.R.A. and School Curriculum in Science in the seventh grade in both schools. That a study be made of the teaching-learning activities in seventh grade Science in both schools.

2. That a comparative study be made of both the S.R.A. and School Curriculum in Language Arts in the seventh grade in both schools. That a study be made of the teaching-learning activities in the seventh grade Language Arts in both schools. That a special study be made of the grammar usage category in the seventh grade in both schools. The procedures utilized in Table XII and XIII above are recommended.***

3. That a special study be made of the category concept in School B in the seventh grade. The method of approach illustrated in Table XII and XIII above is recommended.*** That a comparative study be made of both the S.R.A. and School Curriculum in arithmetic in the seventh grade in both schools.

4. That a special consideration be given to an in-depth study of the basic reading program with special attention given to vocabulary and comprehension in the seventh grade of both schools. That special studies also be made of vocabulary in the eighth grade of both schools.

***Refer to Table XIII, Interpretation, p. 70
GENERAL RECOMMENDATIONS

1. That a workshop in techniques of planning behavior goals and performance criteria be held for the faculty of both schools.

2. That special consideration be given to the "list report of scores" of the test results of the S.R.A. Achievement series for individualized instruction and/or a tutorial program for students who rank low.

It has been recommended above that a study be made of the school program and the S.R.A. Achievement curricula to determine to what extent they are in harmony with each other. This was recommended in order to help the teacher make valid judgments concerning test data. It was also recommended for the purpose of developing a broader perspective perhaps on program content.

Important Information Regarding SRA Achievement Test Series for Project Schools

The S.R.A. Achievement Series can be used as a guide in teaching and learning with emphasis on the test curricula included. It can also be used as a point of beginning into a broader scope in teaching and learning. It is suggested here that teachers in the project schools make a study of the test curricula that will be found in this report.
A brief description of each test should assist in program planning:

The Social Studies Test measures understanding and application of representative principles drawn from geography, history, government, and the other social sciences; for example, there are items dealing with communication, education, manufacturing, pivotal events in human development, and contributions of great leaders. A further breakdown of the content of the test indicates items that have to do with Place Geography, etc.

The Science Test measures the student's knowledge and understanding of certain representative facts and principles of science. It stresses those concepts, generalizations, basic classifications, and cause-and-effect relationships customarily presented in elementary and junior high school science courses. Items sample learning about a wide variety of subjects: plants, animals, climate, weather, conservation, astronomy, simple machines, electricity, magnetism, light, sound and scientific method.

The Language Arts Test measures a broad spectrum of skills in the use of language. The capitalization and punctuation subtest measures the use of capital letters in proper nouns, abbreviations, and book titles, or apostrophes in contractions and possessives, of quotation marks, semicolons, and hyphens. Usage items involve common grammatical errors of tense, redundancy, double negatives, subject-verb agreement, case of pronouns, and homonyms. The Spelling subtest measures mastery of the basic knowledge of word structure by means of recognition.

The Reasoning, or problem-solving subtest of the Achievement Series uses a story format to measure understanding of the logical and mathematical steps that lead to the solution of arithmetic problems. Problems require the students to identify the facts relevant to a solution, select the arithmetical process to be used, and carry out the computation necessary to arrive at the solution.

The Reading Tests of the Achievement Series use complete stories to measure reading ability in typical situations. The tests were constructed after carefully surveying children's reading interests at various grade levels and studying the types of materials they are commonly asked to read. All subtest vocabularies

were carefully checked for appropriations of difficulty level by reference to (1) Henry D. Rinsland, A Basic Vocabulary of Elementary School Children; (2) E. L. Thorndike and I. Lorgo, The Teacher's Workbook of 30,000 Words, and (3) A. I. Gates, A Reading Vocabulary for Primary Grade.

The reading selections are drawn from the fields of social studies, science, and literature. Items following the selections measure the student's ability to understand the overall theme of the story, identify the main idea in paragraphs, infer logical ideas, retain significant details, and understand the meaning of words in context. Other reading skills, such as the ability to retain ideas well enough to make comparisons and the ability to read at a reasonable rate, are also called into use.

Two precautions should be observed in interpreting grade-equivalent scores:

1. **Average performance at a given grade level constitutes a range rather than a single grade-equivalent score.** If a class is tested at the beginning of the seventh grade, should students with scores of 7-2 and 7-3 be considered above average and those with scores of 6-8 and 6-9 below average? Decidedly not. If the definition of average performance is restricted to those students whose grade-level scores exactly match their grade placement at the time of testing, only a small percentage of a class would ever rate as average. Average performance should be considered a range, not a point of value.

2. **The conclusion should not always be drawn that the student can compete with students at the level indicated by his grade-equivalent score.** For example, a beginning fifth-grade student a grade-equivalent score of 8-1 on all arithmetic subtests does not indicate that he should be attending eighth-grade arithmetic classes, or that he knows the arithmetic concepts and skills that would be taught in grades 6 and 7. The score indicates that he has mastered what has been taught in the first four years of school in an unusually thorough way.
SRA ACHIEVEMENT TEST CONTENT

Teachers may be interested in knowing the general content of test series. Although this test series is from C of the Multilevel Edition, it should be noted that information is general and therefore test items in all forms are selected from content mentioned below.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Word Meaning</td>
<td>General vocabulary, science, social studies, literary background.</td>
</tr>
<tr>
<td>2. Paragraph Meaning</td>
<td>Main idea, important details, organization and sequence, vocabulary, inference, comprehension of stated content, balanced subject matter content.</td>
</tr>
<tr>
<td>3. Spelling</td>
<td>Words frequently used, errors that are most common, as substitution for vowel phonemes, variant consonant, schwa-sound variants, final e, doubling final consonant, adding -ly, plurals, prefixes with assimilated doubles, ie-ei, omitted syllables, miscellaneous.</td>
</tr>
<tr>
<td>4. Language</td>
<td>Usage, punctuation, capitalization, sentence sense, dictionary skills--multiple meanings, locutions, diacritical marks, and syllabication.</td>
</tr>
<tr>
<td>5. Arithmetic Computation</td>
<td>Fundamental operations with whole numbers, common and decimal fractions, average, changing units of measure, simple per cent, difficulties and careful sampling of other computation types.</td>
</tr>
<tr>
<td>6. Arithmetic Concepts</td>
<td>Place Value, rounding numbers, geometric concepts, meaning of fractions, meaning of per cent, Roman numerals, interrelationships of the operations.</td>
</tr>
</tbody>
</table>
SUGGESTIONS FOR REMEDIAL INSTRUCTION

Remedial instruction is a complex and highly individualized form of teaching which cannot easily be reduced to a list of specifics; of this the authors of Stanford Achievement Test are well aware. But they are equally sensitive to the great need for some specific suggestions that will aid the teacher in meeting the various individual needs and even the needs of the class.

The following suggestions will serve this purpose.

Word Meaning
a. Encourage analysis of multiple meaning of words.
b. Encourage much reading.
c. Make word study a class hobby.
d. Encourage use of words that pupils find in their reading.
e. Keep a changing list of "new" or "interesting" words on the chalkboard.
f. Dictate a passage and then see how pupils can change the words and keep the substance.
g. In grade 6, classify words by subject, part of speech used, root, foreign origin, etc.
h. Conduct exercises in writing a synonym for each of a list of words. Write an antonym for each.
i. Make individual desk dictionaries a potent source of education for each pupil.

Paragraph Meaning

1. Work-type Reading
a. Have pupils write a "headline" for a paragraph. Ask why the headline is a good one.
b. Have pupils suggest different titles for an article.
c. Have pupils suggest subtitles for the main ideas in a passage.
d. Have pupils preview a passage, observing its title, subheadings, conclusions, charts, and the like.

e. Ask questions about details.

f. Ask for a list of events and objects which appear in a passage.

g. Ask pupils to read a sentence which verifies a statement made.

h. Have pupils select the essentials needed to answer a question, prove a point, describe a place or an event.

2. Increasing Speed

Slow reading may result from poor ability in word identification or from slow comprehension of the meaning. To increase speed is difficult and not always advisable. Some pupils may, on the other hand, have developed a casual approach to reading. Have these pupils read with time limits set. Check their understanding.

3. Reading the School Subjects

The most important factors in reading in a school subject are (1) ability to comprehend in general as one reads and (2) knowledge of the vocabulary, symbols, and content specific to the subject.

Of less importance than the two factors mentioned above are certain reading tasks which characterize one subject more than another, such as the following:

a. Reading a drama or a poem with expression.

b. Visualizing the way a machine works as one reads about it.

c. Following detailed directions in performing an experiment.

d. Following a logical sequence of steps in science as one applies a principle.

e. Judging the logic of conclusions from a variety of facts in science.

f. Differentiating in the social studies between facts, opinion, and propaganda.

g. Reading social studies data from maps, charts, photographs, cartoons, and political posters.

h. Translating a problem in mathematics into one's own language and then into a mathematical sentence.

i. Performing some function while being guided by a detailed explanation of it.
Spelling

Five types of spelling difficulties may be defined roughly as follows:

1. Gross errors, such as oarge for orange, ourevabe for everybody, and dysedid for decided
2. Errors in using the wrong variant spelling of a phoneme; fone for phone, danse for dance, and declair for declare
3. Errors made in structure, such as those made in forming plurals and in writing inflected forms and derived words
4. Lack of a clear perception of a word in written and spoken form, such as preform for perform, and probly for probably
5. Careless errors made while being preoccupied with the ideas about which one is writing.

The following suggestions may be helpful in aiding pupils who make errors of the types listed above:

Types 1 and 2. Discover the degree of inadequacy in phonics by dictating 20 to 30 synthetic or imaginary words, such as bez, kalwo, tiemel. Score any reasonable spelling as satisfactory.

Some pupils at this level will still need assistance with phonics. Such exercises as these will aid their learning of the spelling of the sounds:

Have pupils write the first (or last) letter (or blend) of words which you pronounce.

Have pupils write synthetic words which you create such as blard, skove, stame, flimp, bams, duft, dwinks, twarge, etc. You can make words by combining the following blends with vowels and consonants:

**Initial Blend.** bl, br, dr, dw, fl, fr, gr, wh, (hw), kl, (cl), kr (cr), kw, (quit), pl, pr, sk, (sc), sl, sm, sn, sp, st, sw, tr, tw, thr

**Final Blend.** lb, rb, lch, nch, rch, ld, nd, rd, lf, rf, lge, (bulge), nge, rge, lk, nk, rk, sk, sl, rl, lm, rm, zm, ln, rm, lp, mp, rp, sp, fs, ks, ls, ms, ns, ps, rs, ft, kt, lt, nt, pt, rt, st, ath, fth, lth, nth, rth, lv, rv

Type 3. Give unusual words which involve the adding of endings, as adding -ed, and -ing to tan, stoke, hall, crash, regret, arrange, barter, defer; -ly to able, frank, and ordinary. Write the root word on the chalkboard first.
Type 4. Develop practice experiences in pronunciation and in spelling by syllable.

Type 5. Require proofreading and encourage use of dictionary. Test the very slow learners with words selected from the spelling books of grades 2 and 3. Dictate them in groups of 30 and have pupils keep in notebooks the words they misspell. Use a test—correct—test procedure.

Language

Remedial instruction in usage comes slowly. The suggestions which follow help in the improvement of language.

a. Continually set up goals of good usage.

b. Discuss common errors.

c. Repeatedly correct written work. Have pupils analyze their own errors.

d. Have pupils construct sentences orally and then write these sentences in good form. Analyze the sentences.

e. Dictate to the slow learners series of short paragraphs which involve punctuation. Then have pupils rewrite each one and change the sentence structure as they rewrite.

Arithmetic Computation

A tabulation of the errors for each item will reveal possible deficiencies in computation. Remedial procedures can be developed as these errors are revealed.

Poor facility with the number facts can be checked by dictating 25 fact questions at 5-second intervals, as 4 x 6 . . . . 7 x 9 . . . 8 x 5 . . . 9 x 6 . . . etc. Pupils will write only the answers on an "answer strip," a piece of ruled paper 2" by 11".

Present examples with zero difficulties to reinforce knowledge of place value as

\[
\begin{array}{cccc}
405 & 630 & 113 & 10102 \\
-318 & -527 & -97 & -8347 \\
420 & 651 & 203 & 640 \\
x302 & x340 & x570 & x320 \\
\end{array}
\]
Arithmetic Concepts

Concepts in mathematics at grade 5 and 6 extend over a wide range of mathematical principles. Few specific remedial suggestions can be made, other than to check specifically for understanding of such concepts as the following:

- Meaning of number vs. numeral
- Place value in notation
- Roman and Arabic numerals
- Decimal notation; examination of other bases
- Expanded notation
- Role of zero and of one
- Meaning of fractions
- Meaning of equality as different names for the same number
- Meaning of the operations; subtraction as the inverse of addition and division as the inverse of multiplication
- Properties of the operations
- Relation of exponents to factors and to place value
- Meaning of scientific notation
- Seeing geometric figures as points, lines, and planes
- Understanding measurement as comparison
- Seeing if-then relationships
- Facility with number sentences, order of operations
- Solution of equations

Arithmetic Applications

Problem-solving ability may be improved by this three-step procedure: (1) understand fully what the problem is; (2) translate the problem into meaningful terms, and (3) structure it in a mathematical sentence or model.

Develop a background for understanding the setting in which a mathematical application is being made.
The following techniques may aid understanding:

a. Have pupils express solutions without using any numbers. (For example—the difference in heights will be the measure of the taller minus the measure of the shorter.)
b. Have pupils choose among possible equations for the correct solution.
c. Have pupils judge by estimation the reasonableness of a derived answer.
d. Have pupils write problems of their own.
e. Give partial data and ask upon what additional data the answer depends.
f. Have pupils diagram application situations.
g. Have pupils label all answers and situations.

Social Studies and Science

Social studies and science are commonly classified as "content" subjects. Each has, however, some uniqueness of approach. Science in particular is characterized by what is referred to as the scientific method. The method is not well defined at this level, and it may be as characteristic of study in the social studies as in science. The following objectives should characterize these two subjects:

Acquisition of knowledge, both of facts as we now conceive them and generalizations

Recognition of the changing nature of knowledge and an appreciation of the ways in which new knowledge unfolds

Ways of evaluating truth vs. falsity

Elementary designs to discover knowledge new to the pupil

An eagerness to learn new knowledge

Systematic organization of study: an efficient study plan, a get-right-to-work attitude, a knowledge of resources, a good dictionary habit, etc.

An open mind on issues; a willingness to look at the data

An emerging set of values by which a pupil lives

A growing vocabulary in each subject as the means of thought and communication.
The Gray's Paragraph Reading Test was given to 100 selected students in November and March of the school year of 1970-71 in the project schools of this report.

Table XIV does not reflect the growth status of all students. The Table only reflects the growth status of 23 selected students out of the 100 who rated seventh grade and below in November. The growth status reflects the algebraic difference between the placement received in November and March.

Table XV reflects the grade placement in months and years with the frequency representing the number of students in each class. For example, Class 1.0 through 0.5 months has a frequency of 4 which means that there are 4 students in the class (group).

It should be noted that 10 students which represent about half of the students rated a grade placement from 10. to 1.9. It should be noted that 13 students, which represent over half of the number selected, had a growth status from 1.0 to 3.0. The following summaries are herewith presented:

Twenty-three students out of 100 were selected as indicated in Table XIV based on the number of students who received a grade placement of 7.0 and below in November.

Thirteen students received a growth status of 10. to 3.0. All students showed some growth with one exception as reflected in Table XIV.

The following conclusions are herewith presented:

Significant growth in reading was made by 23 selected students listed in Table XIV. We assume that this growth evidently was due to stepped up programs that were provided by the project along with the normal program carried on by the school itself.

The following recommendations are herewith presented:

That the Gray's Paragraph Reading Test be utilized to measure students for group techniques in the teaching of reading in the seventh and eighth grade at the project schools.

The test can be easily administered, scored and interpreted, therefore; can be used in grouping techniques, especially in the Language Arts area.
NOVEMBER AND MARCH SCORES OF 23 SELECTED STUDENTS OF THE PROJECT AND THE GROWTH STATUS* OF EACH STUDENT

**TABLE XIV**

<table>
<thead>
<tr>
<th>November Score</th>
<th>March Score</th>
<th>Growth Status</th>
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<tbody>
<tr>
<td>4.9</td>
<td>5.2</td>
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<td>6.1</td>
<td>8.0</td>
<td>+1.9</td>
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<tr>
<td>5.9</td>
<td>8.0</td>
<td>+2.1</td>
</tr>
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<td>8.0</td>
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<tr>
<td>6.7</td>
<td>7.3</td>
<td>+0.6</td>
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</table>

*Growth Status: Algebraic difference between November and March Scores*
THE GROWTH STATUS* IDENTIFIED BY GRADE PLACEMENT OF 23 STUDENTS AND FREQUENCY IN EACH CLASS OF STUDENTS WHO RECEIVED THE GRAY'S PARAGRAPH READING TEST IN PROJECT SCHOOLS

TABLE XV

<table>
<thead>
<tr>
<th>Months</th>
<th>Frequency</th>
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</thead>
<tbody>
<tr>
<td>0.1 - 0.5</td>
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<tr>
<td>0.6 - 0.09</td>
<td>6</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Years</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 - 1.9</td>
<td>10</td>
</tr>
<tr>
<td>2.0 - 2.9</td>
<td>2</td>
</tr>
<tr>
<td>3.0 - above</td>
<td>1</td>
</tr>
</tbody>
</table>

*Growth Status: Algebraic difference between November and March Scores
REPORT OF CHARRETTE EXPERIENCES

INTRODUCTION

We define a charrette as a group with common interests gathered together to consider problems common to the group. It is designed to air problems in an attempt to find solutions that will make for future program planning and development.

The Junior High School Charrette, composed of students, teachers, supervisors, counselors and administrators of the Millbrook Junior High School and the Garner Junior High School of Wake County, North Carolina, was held on the campus of Shaw University in March 1971. The Charrette was structured to get the opinions of the students regarding the innovative project and to acquaint students with problems involved in the education of students.

Students were given the opportunity to be critical of the educational program they were receiving and of the attempts made in this project to provide some leadership in educational development.
A. Written Expressions of Opinions

1. Everytime I try to improve my school work something or someone stops me.

The majority of the students indicated that sometimes this happens but not very often. A sizeable number indicated that this was not true for them.

2. In thinking about what will happen when I grow up.

Most of the students said that they were sure that things will turn out well for them. A large number had some doubts about their success.

3. The things which I do in school that I am most proud of.

Get good grades on my report card stood way out. Being well liked by all the students came in second. Nothing that I do in school makes me proud received the smallest number of votes.

4. During the last two or three years, it seemed to me that.

School is much more directly related to life outside the school received the highest number of votes. About half of the students expressed the fact that school has little relationship with life outside the school and a sizeable number felt that much of what they hear in school is contradictory to what they see and hear outside the school.

5. During the past school year, did you ever stay away from school just because you didn't want to come?

The vast majority indicated NO. Only a few answered YES.

6. Does your teacher understand children?

The majority said sometimes. A sizeable number indicated never.

7. When things go wrong at school, I usually:

Try to see why things went wrong and work harder to correct them, received the largest number of votes. A sizeable number of students indicated that: "the teacher is treating me unfairly." Quite a few students said that: "they wish that I were much older and didn't have to go to school."

8. Which one of the following best describes the way you feel when the teacher doesn't like what you have done?

The majority of students indicated that I try to find out what the teacher wants so I can do that. A large number of students said that I don't care what the teacher thinks.
9. How often do you and your parents talk about your school work? The majority of students indicated that just about every day. A sizeable number said never, or hardly ever.

10. During the past year or two has your mother or father visited school during the time that school was in session? The majority indicated that "Yes, my mother and father have visited at least once in the past two years." A large number said that I don't remember that my mother or father have visited school at one time during the past two years. A sizeable number also said my mother or father have visited school but not during class time.

11. Which of the following statements do you think is most nearly true? The majority indicated that adults usually do what they say they will do. A large number said that adults sometimes do not do what they say they will do. A sizeable number said that adults very often do not do what they say they will do.

CONCLUSION

1. It seems that interruptions of the learning process in the project schools does not seem to be a prime factor.

2. It seems that the majority of students at the two schools are optimistic about their future. However, too many students seem to be uncertain.

3. The ultimate goal of the majority of students seems to be that of grades and acceptability as opposed to the total development of the whole person.

4. It seems that the students in the project schools think that education should extend beyond the boundary of the campus. Since a significant number expressed the opposite notion, education confined to the campus is a factor that should be considered.

5. The majority of students enjoy going to school.

6. The students in both schools are concerned about the attitude of teachers towards them. There seems to be a strong feeling among students that some teachers are not attuned to the welfare of the students.

7. It seems that most of the students under study are willing to make changes for the good within the framework of the school system. There also seems to be a conflict in attitudes between a significant number of students and teachers. This may have something to do with the large number of students who indicated that they would like to stop school.
8. There seems to be cooperative understanding between students and teachers, however, a significant number seem to be indifferent towards the attitude of teachers.

9. There seems to be rapport between parents and students for the most part; however, a significant number of students seem to be indifferent towards their parents.

10. It appears that the majority of the parents show some concern for the education of their children; however, a significant number of parents show little interest in the education of their children.

11. It appears that the majority of students under study respect the integrity of adults; however, a significant number do not respect the integrity of adults.

RECOMMENDATIONS

1. That a special study be made to discover students with low ambition and that the counseling services be enriched and broadened to make for a more definite decision on the part of the students concerning their future. Further, that guidance would include group discussions, the showing of films and the making of field trips that tend to point up information that will help students make specific decisions concerning the future.

2. That a study be made by the staff to consider the opinion of students regarding teaching emphasis on grades. Further, that the results of this study be used to evaluate the program of learning at both schools by utilizing the whole child concept as a criterion.

3. That the staff study the present program in light of the transfer of learning theory; in other words, teachers should know what phases of their program have carry-over values beyond the campus. Further, that the staff give due consideration to educational relevance in their planning and programming.

4. That the administration of both schools consider setting up workshops designed to better the relationship between students and teachers and that students be permitted to participate and to express their opinions in these workshops. That workshop recommendations be organized for serious consideration. Further, that a study be made of potential drop-outs to determine its seriousness at that point. Further, that parents participate in the workshop and that parental attitude be a part of the workshop agenda. That parents and students to participate be selected at random.
A SUMMARY OF CAUSES FOR JOYLESS SCHOOL MOMENTS

Problem 1--Joyless School Moments

Some students complain that there are many dull moments in school. Schools are not joyful according to the opinion of some students. They are happy when the time comes to leave school.

If you are conscious of this situation or if you have heard students express these opinions, what do you think are some of the causes? List these causes. List some suggestions for improvement.

The following cause seems paramount:

1. Some textbooks are boring with little interest on the part of some teachers to revitalize.
2. Inflexible schedule.
3. Inadequate field-trips and noncommittal learnings.
4. Teacher domination of teaching and learning.
5. The lack of motivational techniques.
6. The lack of relevant homework as opposed to busy work.
7. The lack of personal interest in students on the part of teachers.
8. Inadequate breaks during the school day.
9. Lunch breaks too short.
10. The isolation of slow learners in some cases.
11. No student lounge.
12. Some teachers don't have a sense of humor.
13. Some of the subjects are dull and listless with no meaningful objective.
14. A few students utilize time which does not give others a chance to express themselves.
15. Inadequate repair services.
16. Some students are afraid of teachers.
17. Some teachers are too old-fashioned.

18. Students get tired of doing the same thing all the time.

19. The teacher does the scheduling.

20. Some teachers are prejudiced and are too hard on students.

21. Some teachers don't care for the welfare of students.

Suggestions for Improvement

1. Education should involve more sex education.

2. More adequate school facilities.


4. Classroom work should be more understandable and interesting.

5. More younger teachers between the ages of 21 and 45.

6. Classes should be more informal.

7. More pupil-teacher planning.

8. More time in the cafeteria.

9. A free period sometime during the day.

The following conclusion is herewith presented:

That there are joyless school moments and for some students these moments might be considered to be a large part of the school day. That these moments are joyless because not enough attention has been given to causes. Further, that these causes are not unreasonable and many of them can be corrected if a positive approach is given due consideration.

The following recommendation is herewith presented:

That the administration provide the opportunities for teachers to study the causes listed in this report and to consider the suggested improvement measures as listed by students in this report. Further, that teachers consider innovative teaching and learning
situations that make for subject matter enrichment, motivational techniques, and pupil-teacher planning.

Problem 2—Social Studies Learning

In our schools today, Social Studies are taught in two different ways: (1) memorizing dates and accumulating facts; (2) while learning facts, activities are provided that will help students to learn how to live with others and how to live in the society in which they find themselves.

Which one do you prefer for students? Why?

Summary

All students selected number two (2) and they listed the following responses.

Responses

1. Prefer number two because memory work is outdated, takes too long and is boring.

2. Number two makes change more interesting.

3. The second because it makes studying more interesting.

4. No. 2 because you get to have an active period; work better with students.

5. No. 2 because No. 1 you just memorize dates and accumulate facts.

6. Preference #2 because it breaks the routine, easier to learn, more movies, group activities, and memorizing doesn’t stay with a person.

7. No. 2 because dates and facts aren’t important; they are on record and don’t involve our lives.

8. No. 2 because it gives students more freedom to voice their own opinions.

9. No. 2 while learning facts, activities are provided that will help students to learn how to live with others and how to live in the society in which they find themselves.

10. No. 2 depends on the person himself. If he memorizes dates or facts, he should prepare himself to live.
The following conclusion is herewith presented:

That students in the project schools are in rebellion against the memorizing technique as stated in problem 2. They seem to be more interested in relevant learning activities.

The following recommendation is herewith presented:

That teachers consider a more meaningful use of dates and facts, and that some consideration be given to a reconsideration of the learning process as it pertains to present day living. Further, that an in depth study be made of the aims and objectives of education, especially elementary education as has been seen by current authorities and researchers. Further, that a study be made of pilot projects in education and educational models as prepared by various universities (see chapter on evaluation in this report).

Problem 3—Classroom Management

Imagine that you are a teacher. Describe the classroom you would have. What would be your attitude toward fast and slow learners?

Summary

1. Integrate slow learners and fast learners and set up teaching procedures that will complement each group.
2. Teaching should be such that students can learn at their own rate.
3. Would include more maps and films.
4. Would set up classroom goals.
5. Would spend more time with slow learners.
6. Would provide group organization for teaching.
7. Would provide a bright and inviting classroom.
8. Would get new furniture for classroom.
9. Would provide bright and lively colors for classrooms.
10. Would provide periodic changes in classroom scenery.
11. Would have students helping slow students.
12. Would have discipline but in a friendly atmosphere.
13. Would have free discussions.
14. Would see that slow students would not hamper fast students.

15. Would treat all students equal.

16. Would have patience with students.

17. Would provide opportunities for students to share ideas.

The following conclusion is herewith presented:

It seems that many of the students reject many phases of the present system in some classrooms in the project schools. Further, it seems that some of the age old classroom management problems may reach a critical point.

The following recommendation is herewith presented:

That the faculty and staff make a critical analysis of the classroom management problems pointed up by students in the report. Further, that a workshop be set up in which selected students (random) might participate for the purpose of considering new and relevant approaches to classroom management.

Problem 4—Demonstrations

Several outside teachers have been in your school this year to demonstrate some teaching techniques in an effort to try out some new ways of teaching and learning. They are anxious to know what you think of some of these demonstrations.

Make a group report on reactions to these demonstrations.

Summary

The following responses were given by students in the project:

1. Some expressed the fact that some demonstrations were boring and some were interesting.

2. Some demonstrations didn't provide for student participation and many students expressed the fact that they thought it should.

3. Some demonstrations provided opportunity for student participation; students expressed their enjoyment of this type of demonstration.

4. More time should have been allotted for demonstrations.

5. There should have been more demonstrations.
6. We like the demonstration for it helped us to see how other teachers teach.

7. It gives us the opportunity to hear other teachers for we get tired of listening to one teacher all the time.

The following conclusion is herewith presented:

It seems that most of the students in the project welcomed and enjoyed demonstrations. However, those demonstrations which did not involve student participation seemed to be boring. It seemed that the students liked demonstrations because they provide an open door to new vistas of learning. These vistas could provide excitement and motivation of two techniques so needed in educational pursuits.

The following recommendation is herewith presented:

That more demonstrations be provided by outside personnel and that these demonstrations be designed for student participation. Further, that ample time be allotted for demonstrations that will make for understanding and continuity.
THE CHARRETTE EVALUATION

Elsewhere in this report mention is made of the charrette that was held at Shaw University for seventh and eighth grade students of the project.

One goal of the charrette was to provoke students in the project to express themselves concerning the work that was done for them through Shaw University's special education project: "innovative selected learning activities for seventh and eighth grade students."

One week following the charrette, students were asked to evaluate their experience.

It should be noted that the student expressions are here-with presented in the same manner as listed on the questionnaires. Very little, if any, changes are made in style of expression.

The following is a result of the evaluation:

I. Do you think the charrette was worth the time you spent at Shaw University on February 5, 1971?

The following are sample comments from the answer YES.

1. I liked the way we told what we liked and disliked about the subject.
2. The lunch was enjoyable.
3. We could say what we wanted to.
4. I think it was very educational.
5. I found out about teachers' problems.
6. I learned a lot about students' problems with teachers.
7. It helped the teachers understand more about students.
8. I think it was very exciting and I would like for it to continue.
9. For the first time I got a chance to express my views.
10. It gave us a chance to get out of school.
II. Write one idea you gained from the experience.

The following are samples of expressed ideas.

1. We learned how to work as a group.
2. We learned how most young people feel about school.
3. We learned the value of teaching ourselves.
4. I learned how some students would like for the school to make changes.
5. That us kids can say what we want to without being told that we're wrong or that it is a bad idea.
6. That students when they want to can come up with pretty good speeches.
7. The idea that teachers have it harder than we think.
8. I learned how to understand the teacher and her teaching methods.
9. That teachers have a hard time teaching when students are talking.
10. I realize how the teachers feel when the class of about thirty-five students start talking and interrupting her.
11. I gained the idea that if you're nice to people, they will be nice to you in return.
12. I got to see what a university looked like on the inside.
13. I learned about people from other students.
14. None.
15. Everyone blames everything on the teacher which I think is stupid.

III. What one word would you use to describe your feelings about the charrette?

The following words were used by students to describe their feelings about the charrette:

interesting, nice, great, WOW, inspiring, good, delicious (food), learn through experience, fun, educational, alright, cool, wonderful, exciting, tremendous, fine, fantastic, enjoyment, stupid, OK, worthwhile, excellent, sincere, honest, helpful, understanding, groovy.
The following are reasons as answers to the question why.

1. I like the first one and it helped me.
2. Because it enabled me to express my own feelings about school.
3. It was fun.
4. It helped me to learn the methods of other teachers.
5. Because it talked about things that I could change.
6. I like the experience.
7. I can express myself without being held back.
8. It's a great experience.
9. I can get out of school.
10. We got somewhere.
11. This gave you your chance to tell about your own experience.
12. I learned about different people and different races of people.
13. I had a chance to express myself when someone would listen to
14. They are cool.
15. I learned a lot.
16. It's interesting to know how to experience a real group discussion.
17. I would like to make more comments next time.

The following are reasons for NO answers to the question why.

1. I just do not like it.
2. I really did not learn that much from the charrette.

V. Do you think the students were sincere in their responses?

All said YES.
VI. If you had the opportunity to appear in another charrette, what is the one thing you would like to talk about?

The following are things that the students would like to talk about.

1. The problem of money for students for more equipment, etc.
2. Our teachers.
4. How students can plan and control a school for one week under the supervision of a teacher.
5. Incompetent teachers.
6. To talk about the way students are treated.
7. The way teachers teach.
8. Sex education.
9. Why the student should participate in many other activities.
10. How to get homework.
11. How can students improve teachers.
12. Lunch period.
13. Drugs in the school.
15. Human relations.
17. Punishment.
18. Life after graduation.
21. Student participation and response in class.
22. Teachers standing up talking the whole period while we could be reading and asking them questions.
23. Boats.
25. Student rights.
26. Making school more interesting.
VII. Would you like to have this type of experience in your classroom? Yes. Why?

The following are reasons for YES answers to the question why.

1. Because a lot of people don't know about sex.
2. To see what the reactions of the student would be.
3. I think everyone would benefit.
4. Because it is more fun than the drab old everyday subjects.
5. It might help others in their work a lot.
6. I learned more.
7. It may help solve problems of schools when everyone's opinion can be heard. Also thoughts will be brought out by students that may otherwise be suppressed, in a rigid, "go-by-the-book" classroom.
8. Better than doing classwork and its fun as well as getting something done in the way of education.
9. Because I could talk about other things which I could change.
10. I like it, school needs to be fun anyway.
11. So everybody can get the same experience we got when we went.
12. You can express yourself, it's really great, no one laughs at you.
13. To see if my classmates have the same opinions about these questions as I do.
14. For better communication.
15. Let other students enjoy the same experience.
16. The class would learn too.
17. Because we should talk about things in school that we are in or take a part of.
18. Because I think the teachers would enjoy it as much as the students.
19. To find out how my other classmates feel about these sort of things.
20. Everyone in the class could participate in the discussion.
21. To give people a chance to express themselves.
22. It's nice to talk about stuff.
23. To learn about teachers, friends, and everybody's way of learning that is best for them and teachers can improve themselves.

24. You are able to get acquainted with expressing your feelings in a large group.

25. In your classroom you are more open to discussion.

26. It is better than the same routine everyday.

27. Maybe my teacher would wake up to some of her lousy teaching techniques.

28. I think it might end up to give us a little more freedom.

29. Would be an experience to cherish.

The following are reasons for NO answers to the question why:

1. I don't think people would get sincere enough about their feelings.

2. I just didn't like it.

3. No comment.

4. The class might get out of order.

The following summaries are herewith presented:

Most of the students enjoyed the opportunities they had for free expression. Many of them thought the experience was educational and exciting. Many of them felt that they learned more about the problems of students and teachers in teaching and learning situations. A large number of students felt that the experience helped the teachers to better understand students. A few indicated that the experience gave them a chance to get out of school.

The majority of students felt that they learned how to work as a group. Many of them indicated that they learned how to be leaders and teachers themselves. They also felt that the charrette type of experience provides for top performance of students. Many of the students gained the idea of the value of inter-group and inter-race relations. Quite a few indicated that they were happy to see the inside of a university.
The vast majority of students described their feelings about the charrette as outstanding. A small group indicated they felt that the charrette was stupid.

The vast majority of the students would like to participate in another type of charrette experience. Most of the reasons were the fact that a great deal of progress was made in student participation, leadership, self-expression, pupil responses and intergroup relations. A few indicated they did not like it.

All students indicated that they thought that students were sincere in their responses.

The vast majority of students felt that they would like to experience another charrette. Many students felt that they would like to discuss the school bond issue and other problems solving school finances. Many students felt that they would like to discuss school administrative problems and teacher competency. Many of them indicated that they would like to discuss the treatment of students by teachers, teaching methods, and sex education. A large number of students listed homework and drugs as topics to be added to the next charrette. Human relations, environmental problems, life after graduation and dull classrooms were high on the list for a proposed agenda for the next charrette.

The vast majority of students felt that the charrette type of experience should be part of their classroom activities. The vast majority thought that everyone would benefit because fun will enrich drab school subjects. The vast majority felt that this kind of experience would help solve the problem of schools because the opinion of students can be heard.

Many students felt that this type of experience makes for better communication and more student participation. A large number of students felt that the teachers would also enjoy, which would in turn improve pupil-teacher attitudes. A few said that they would not like to.

The following conclusions are herewith presented:

It seems that most of the students were concerned with free expression. Student-teacher relationships served to be prominent in the thinking of most students.

Evidently, students learned much about the value of group dynamics in teaching and learning. Leadership training, which
is a part of group dynamics, seemed to have been an exciting experience. It also seemed that they felt top student performance can best be gained through group dynamics. It also seemed evident that they felt that intergroup and interracial relations can best be experienced through group action.

Evidences are prevalent among the students that a charrette type of teaching-learning experience is outstanding.

Student participation, leadership training, self-expression, pupil responses, intergroup relations seem to stand out in student thinking as they rehash the charrette experience.

Sincerity was also in evidence.

In their desire to have other similar experiences, it seems that wider and deeper problems involving education are prominent in their thinking. Evidence indicated that problems pertaining to school finance, administration, methods and techniques of teaching seem paramount. Also such current issues as environmental problems, drugs and human relations seem eminent in future planning.

Evidence is very strong that students feel that this type of teaching and learning should be a part of classroom experiences. These issues and problems so closely allied with their living, should be substituted for what they call "drab" curricular offerings.

It seems that they were of the opinion that this type of teaching and learning will open up lines of communication between students and teachers which in their opinion will make for improved student-teacher relations.

The following recommendations are herewith presented:

That the administration and faculty of the project schools consider more group dynamics as a part of the teaching-learning program planning.

That the curriculum will be enriched to include problems that are closely allied with everyday living and learning.

That if needed, faculty workshops be held that will provide training and experience in curriculum enrichment and group dynamics.

*NOTE: Students made reference to their knowledge of teacher problems with respect to discipline. Students were selected to play the role of the teacher. Members of her group were instructed not to cooperate by talking and doing other undisciplined measures. There were five (5) groups enjoying in this type of role-playing. The teacher has a difficult time trying to get order to begin her role. The plot was soon revealed and discussion ensued.
Planning

The planning for the project "An Innovative Project to Motivate Seventh and Eighth Graders in Selecting Learning Activities" initially began on the campus of Shaw University by the teacher education faculty. The group agreed upon procedures which led to the successful conclusion of the project.

The procedures through which the project was piloted followed the line and staff organization pattern of the Wake County Public School System. The administration, supervisors, teachers and pupils in schools selected for the project were cooperative and helpful.

Testing

The administered tests were limited to the Gray's Paragraph Reading Test and the S.R.A. Achievement Series for the elementary grades. The Gray's test revealed that wherein most of the students were good readers, there were a significant number who were slow readers. The administering of the two tests revealed that significant growth in reading took place during the interim of the two testing periods.

The growth status data of the S.R.A. Achievement Series pointed up outstanding growth in pupil achievement between the November and March interim.

Demonstrations

Demonstrations in teaching techniques and methods were presented by personnel in the Shaw University education department, also personnel in the Wake County Public School system and the State Department of Public Instruction.

The demonstrations included innovative techniques and methods in teaching and learning, a breadth of resources and group response and reactions that made for excitement and growth.

Student evaluation revealed that students for the most part enjoyed demonstration experiences and asked for more.

Inventory Instrument

Inventory instrument revealed the likes and dislikes of students with respect to subject matter areas. The dislikes were the culls, an irrelevant feature of subject matter areas. They seem to have been the ones least likely to provide the enrichment and meaning to life.
The likes in subject matter areas that students checked were generally those phases of the curriculum that were meaningful and developmental in student growth.

One can find similarities in the likes that students checked from the inventory and the testing curriculum of the S.R.A. Achievement Series. In some demonstrations which students were requested to list what they wanted to know, the information received from this experience compared favorably with textbooks, supplementary and library material, with the S.R.A. Achievement Test Series curriculum and the likes as expressed by students in the inventory instrument.

The Charrette

Students were requested to express freely, orally and in writing, their feelings concerning teaching and learning situations. Students were provided with instruments to direct their thinking (see appendix). Role playing experiences were provided in which selected students were placed behind the desk as teachers. Students were instructed to provide negative experiences and the reactions of the student teachers were observed. This was done for the purpose of getting students to appreciate the role of the teacher in the classroom.

Charrette Evaluation

A short time after the charrette, the students participating in the charrette were asked to evaluate the charrette both in writing and oral expression. A tape recording was made of the oral expression and the written expression was tabulated and appraised.

They were asked what they conceived the purpose of the charrette to be? They were also requested to give the weak and strong points of the charrette and what their feelings of the experience were.

The vast majority of the students provided favorable responses. The responses were glowing and overwhelming.

The students also provided suggestions for the improvement of future charrettes. It should be noted that their responses included such items as school bond issues, administrative problems and educational planning.

CONCLUSION

Planning

Togetherness in planning on the part of the working staff provides direction for all concerned. Further, line and staff
planning is a major factor to be considered in the success of the project.

Testing

Based on the growth status of the S.R.A. Achievement Series and Gray's Paragraph Reading Test, it seems that the educational program received by the students during the interim provided significant growth for the vast majority of students selected for the project.

Demonstration

It seems that from the reactions and responses of the students that demonstrations enriched, stimulated and provided some guidance for teachers which made for the increase in growth status of the students in the project schools.

Inventory Instrument

That student input is reliable in sound program planning and also as a motivation in setting up teaching techniques.

The Charrette

That student input in reliable in evaluating educational programs.

Charrette Evaluation

Charrette-type experiences should be included in education program planning.

RECOMMENDATIONS

Planning

That planning procedures as stated in this report are to be considered in future educational projects that involve students outside the university community.

Testing

Due to the breadth and depth of its curricula, the S.R.A. Achievement Series is recommended as a good instrument for measuring achievement and as a guide for remedial instruction.

Due to its simplicity in administering, the Gray's Paragraph Reading Test is highly recommended in organizing classes for reading groups.
Demonstrations

According to the enrichment values of demonstrations as expressed by students in this project, it is recommended that demonstration be considered in program planning in the public schools and that the services of the Education Department of Universities and Colleges, as well as the State Department of Public Instruction and special area teachers from the local school systems be utilized.

Inventory Instrument

That student inventory be considered as a part of the learning process in educational planning.

The Charrette and Charrette Evaluation

The Charrette-type of experience should be considered a part of the learning process in educational planning.
DEVELOPING AN HIERARCHY OF CONTENT SUITABLE
FOR ACHIEVING BEHAVIORAL OBJECTIVES

INTRODUCTION

To say that elementary education is at the crossroads in educational planning and programming in America does not say enough at this point; yet at this stage of our national life it does say something. One only needs to listen to the echoes from lay groups, who are impregnated with adverse criticism, to realize that elementary education is at the crossroads.

It should not be comforting to educators to face the fact that all institutions in our society that are associated with men's development are at the crossroads in programming, because education in many ways determines the course and development of these institutions in as much as they touch the lives of its planners and developers. The politician who structures political ideologies and sets forth political theories, the religionists who shape religious thought and action, the scientists who operate in worlds beyond, all are touched in some way by the educators.

Modern educators cannot nestle themselves totally in educational theories of the past as important as they are; rather, they should concern themselves with the changing and shifting times and analyze the demands of our present society as they plan for today's children and youth.

It has been clearly stated that man made more progress in technology, scientific knowledge, etc., during the past fifty years than all the years previous to that time. The last decade has witnessed phenomenal changes in our world society that are staggering and almost inconceivable.

The educator in planning and programming must cope with these changes. In order to do this, we need to add other dimensions to the changing structure of our society. We are faced with rapid increases in population, changes in medical codes and ethics, increased mobility of class structure, shifting population trends, economic instability, change in political structures and Supreme Court decisions.

Above all, the educational planner is faced with children and youth who have been advanced in intellectual growth and hence are based in institutions that are hanging on to archaic and traditional structures. Therefore, campus unrest, racial
disturbances in the schools, increase of crime among sub-teens, should be high on the agenda of planners of education. The hue and cry is for relevance in education.

The educational film "The High School," created no mean stir in lay circles all over the United States. The film was an unrehearsed, on-the-spot, documentation of teaching techniques utilized by teachers and administrators in a certain school. Additional dehumanization tactics included outmoded, irrelevant and dead content matter that were prevalent throughout the school. Stern disciplinary techniques were put in for good measure. Many lay personnel who saw the film indicated that the students were actually dehumanized in that school.

To what extent this dehumanization is duplicated in the schools from kindergarten to university across the country is evidenced by demonstrations on the campuses, increase in the drop outs in elementary and secondary schools, rising crime rate among youngsters, and "hooky playing" as a result of sheer boredom. Recently the press had referred to these institutions as "joyless schools."

The irony of the situation is that no one knows where to place the blame. No segments of our educational hierarchy would like to take the blame for such a dilemma in education. The educators can place the blame on the lay public for nonsupport. Support for education is of prime importance. There is little doubt in anyone's mind that this is not true. For some reason, unknown to us, the lay public does not realize the value of support for education.

We take the position that poor teaching is promoted by poor teachers. Many of these teachers are the "culls" of our teacher-training institutions of higher learning and hence they settle for the low salaries the lay public has provided. Garbage collectors, welders and other similar wage earners receive as much and more by way of salaries than some public school teachers.

In order to squeeze out a mere trickle of support, arms have to be twisted, heavy lobby tactics are employed and in several cases, teachers strike and boycotts prevail.

If a question is raised as to where most of the blame should be shifted, our circle would point to the educational administrators. These are the directors, for the most part, of learning in an educational system. The major tasks of implementing educational objectives are assigned to this group.

We are willing to admit and will attempt to prove later in this paper that educational objectives for American schools are high and noble. We will present what we see as a step-by-step progression of educational objectives as found in educational literature.
In the second phase of our presentation, we will point up some objectives of various areas of learning based on studies made by the North Carolina Department of Public Instruction and based on our observations of student behavior, especially as we have observed them in our demonstrations and observations.

AN EDUCATIONAL INDICTMENT

We are willing to stick our necks out here and indict the architects of educational structures, the administrators, for ignoring the objectives of elementary education which we have already said are high and noble and if followed, we believe our society will receive the benefits.

Our society must share some of the blame, especially the "upper crust" of which boards of education attempted, in their planning, to carry out their objectives rather than the objectives that came out of educational research and planning. This is the main cause for our dilemma.

Instead of planning to fulfill the major objectives referred to above, the 20th Century architects of educational structures spent their time struggling with plans that were concerned with gerrymandering population, planning inferior systems, separating students, setting up track curricular systems for the purpose of providing inferior programs; providing guidance practices and services geared to nothingness and chaos.

These architects are quick to shift the reason for crime on someone else. Some of these architects have attempted to substantiate their shifting through the use of standardized test data. Many of these architects have placed students in inferior programs, administered tests and attempted to justify their acts by comparing disadvantaged students with suburban students. As a result of this planning, which is and has been prevalent for centuries, we have too many schools that are dead, listless, dull and "joyless." Testimonies from college students who come from the disadvantaged areas reveal hooky-playing tactics of pupils in these areas who are forced to attend the "joyless" schools.

The few who come to college are the more favorable victims of this system of educational structure and their testimonies will reveal what happened to the other victims who were not so fortunate.
Juvenile crime has become a monster in our society, an uncontrolled giant that is constantly gaining stature and strength. It has become a "proverbial albatross" around the neck of the American society to the extent that it has moved further and further down the educational ladder and is now common in the lower grades in many school systems. The architects of the schools of tomorrow must unite their behavioral objectives in terms of performance of the children of the future.

There may not be any cure-all in any institution designed to improve society, but we take the position that educators should take a hard look at the educational objectives as set forth by educators who feel that education could solve many of the ills of our society through a positive approach to the solutions.

We believe that once these objectives are studied and honest efforts are made to reach these objectives through cooperative planning and programming, at least we can start in a direction that will benefit the greatest good.

We feel that the following are some advantages of behavioral objectives that planners of education should consider:

1. Improves the instructional process in any classroom organization.

2. Leads to greater individualization of instruction.

3. Helps program individual students through certain experiences in light of their objectives and needs.

4. Leads to the development of a learner-based curriculum, learner-based teaching methodologies, skillful diagnosis and prescription, and open-end curricula—all contribute to continuous progressive education.

5. In classes where pupils are grouped on the basis of maturation, interests or level of sophistication, the teacher can use behavioral objectives to guide these groups as well as through progressive sequences of facts, concepts, and skill acquisitions.

6. An important aspect of both heterogeneous and specially grouped classes, is pupil-teacher planning, in which pupil and teacher together formulate behavioral objectives.

7. Ideally, educational objectives result from and should represent the synthesis of those ideas most conducive to the best possible development of the individual and to the improvement of society.
8. Behavioral objectives should be in terms of what the learner is to be able to do as a result of instruction, starting with the learner and his needs to modify his behavior.

WHY WE CARE ABOUT OBJECTIVES

An objective is an intent communicated by a statement describing a proposed change in a learner—a statement of what the learner is to be like when he has successfully completed a learning experience. It is a description of a pattern of behavior (performance we want the learner to be able to demonstrate.) The statement of objectives of a training program must denote measurable attributes observable in the graduate of the program or, otherwise it is impossible to determine whether or not the program is meeting the objectives.

When clearly defined goals are lacking, it is impossible to evaluate a course or program efficiently, and there is no sound basis for selecting appropriate materials, content, or instructional methods. After all, the machinist does not select a tool until he knows what effects he wishes to achieve. Similarly, a builder does not select his materials or specify a schedule for construction until he has his blueprints (objectives) before him. Too often, however, one hears teachers arguing the relative merits of textbooks or other aids of the classroom versus the laboratory, without ever specifying just what goal the aid or method is to assist in achieving. We cannot emphasize too strongly the point that an instructor will function in a fog of his own making until he knows just what he wants his students to be able to do at the end of the instruction.

Another important reason for stating objectives sharply relates to the evaluation of the degree to which the learner is able to perform in the manner desired. Tests or examinations are the mileposts along the road of learning and are supposed to tell the teacher and the student the degree to which both have been successful in their achievement of the course objectives. But unless goals are clearly and firmly fixed in the minds of both parties, tests are at best misleading; at worst, they are irrelevant, unfair, or useless. To be useful they must measure performance in terms of the goals. Unless the programmer himself has a clear picture of his instructional intent, he will be unable to select test items that clearly reflect the student's ability to perform the desired skills, or that will reflect how well the student can demonstrate his acquisition of desired information.
An additional advantage of clearly defined objectives is that the student is provided the means to evaluate his own programs at any place along the route of instruction and is able to organize his efforts into relevant activities. With clear objectives in view, the student knows which activities on his part are relevant to his success, and it is no longer necessary for him to "psych out" the instructor. As you know too well, considerable time and effort are frequently spent by students in learning the idiosyncrasies of their teacher; and, unfortunately, this knowledge is often very useful to the student with insight. He may breeze through a course armed with no more than a bag full of tricks designed to rub the teacher the right way.

<table>
<thead>
<tr>
<th>PREREQUISITES</th>
<th>DESCRIPTION</th>
<th>OBJECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>what a learner has to be able to do to qualify for a course</td>
<td>what the course is about</td>
<td>what a successful learner is able to do at the end of course</td>
</tr>
</tbody>
</table>

Whereas an objective tells what the learner is to be like as a result of some learning experiences, the course description tells only what the course is about.

The distinction is quite important, because a course description does not explain what will be accepted as adequate achievement; it does not confide to the learner which field he will be playing on, it does not tell him where the foul lines are, where the goalposts are located, or how he will know when he has scored.

THE QUALITIES OF MEANINGFUL OBJECTIVES

You already know that a statement of an objective describes a desired state in the learner. You also know that you have successfully achieved your objectives when the learner can demonstrate his arrival at this state. But how do you write the objectives to maximize the probability of your achieving it? What are the characteristics of a meaningfully stated objective?

Basically, a meaningfully stated objective is one that succeeds in communicating to the reader the writer's instructional intent. It is meaningful to the extent it conveys to others a picture (of what a successful learner will be like) identical to the picture the writer has in mind. Since a statement of an objective is a collection of words and symbols, it is clear that various combinations may be used to express a given intent. What you are searching for is that group of words and symbols that will communicate your intent exactly as YOU understand it. For example,
if you provide another teacher with an objective, and he then
teaches his students to perform in a manner that you agree is
consistent with what you had in mind, then you have communicated
your objective in a meaningful manner. If, on the other hand,
you do not agree that these learners are able to perform accord-
ing to your intention, if you feel that you "had something more
in mind" or that your intent was "misinterpreted," then your
statement has failed to communicate adequately.

A meaningfully stated objective, then, is one that succeeds
in communicating your intent; the best statement is the one that
excludes the greatest number of possible alternatives to your
goal. Unfortunately, there are many "loaded" words, words open
to a wide range of interpretation. To the extent that you use
ONLY such words, you leave yourself open to misinterpretation.

Consider the following examples of words in this light:

<table>
<thead>
<tr>
<th>Words Open to Many Interpretations</th>
<th>Words Open to Fewer Interpretations</th>
</tr>
</thead>
<tbody>
<tr>
<td>to know</td>
<td>to write</td>
</tr>
<tr>
<td>to understand</td>
<td>to recite</td>
</tr>
<tr>
<td>to appreciate</td>
<td>to identify</td>
</tr>
<tr>
<td>to fully appreciate</td>
<td>to differentiate</td>
</tr>
<tr>
<td>to grasp the significance of</td>
<td>to construct</td>
</tr>
<tr>
<td>to enjoy</td>
<td>to list</td>
</tr>
<tr>
<td>to believe</td>
<td>to compare</td>
</tr>
<tr>
<td>to have faith in</td>
<td>to contrast</td>
</tr>
</tbody>
</table>

What do you mean when you say you want a learner to "know"
something? Do you mean that you want him to be able to recite,
to solve, or to construct? Just to tell him you want him to
"know" tells him little—the word can mean many things.

Though it is all right to include such words as "understand"
and "appreciate" in a statement of an objective, the statement is
not explicit enough to be useful until it indicates how you intend
to sample the "understanding" and "appreciating."

Until you describe what the learner will be DOING when demon-
strating that he "understands" or "appreciates," you have described
the terminal behavior of the learner well enough to preclude
misinterpretation.

How can you write objectives that will describe the desired
behavior of the learner? Well, there must be any number of schemes
for doing so; but the method that is described on the pages that
follow is one that is known to work, and it is the one that we
have found to be the easiest to use. FIRST, identify the terminal
behavior by name; you can specify the kind of behavior that will be
accepted as evidence that the learner has achieved the objective. SECOND, try to define the desired behavior further by describing the important conditions under which the behavior will be expected to occur. THIRD, specify the criteria of acceptable performance by describing how well the learner must perform to be considered acceptable.

Although each of these items might help an objective to be more specific, it will not be necessary to include all three in each objective. The object is to write objectives that communicate; the characteristics described above are merely offered as guides to help you know when you have done so. You do not work on an objective until it demonstrates these characteristics; rather, you work on it until it clearly communicates one of your intended educational outcomes—and you write as many statements as are needed to describe all your intended outcomes.

You can test whether a written objective clearly defines a desired outcome by answering "yes" to the following question:

Can another competent person select successful learners in terms of the objective so that you, the objective writer, agree with the selections?

IDENTIFYING THE TERMINAL BEHAVIOR

A statement of an objective is useful to the extent that it specifies what the learner must be able to DO, to PERFORM when he is demonstrating his mastery of the objective. Since no one can see into another's mind to determine what he knows, you can only determine the state of the learner's intellect or skill by observing more aspects of his behavior or performance (the term "behavior," as used here, means overt action). Now, the behavior or performance of the learner may be verbal or nonverbal. He may be asked to respond to questions verbally or in writing to demonstrate his ability to perform a certain skill, or to solve certain kinds of problems. But whatever method is used, you (the programmer) can only infer the state or condition of his intellect through observation of his performance.

Thus, the most important characteristic of a useful objective is that it identifies the kind of performance that will be accepted as evidence that the learner has achieved the objective.
For example, consider the following statement of an objective:

To develop a critical understanding of the operation of the Target Tracking Console.

Though this might be an important objective to reach, the statement doesn't tell what the learner will be doing when he is demonstrating that he has reached the objective. The words that come closest to describing what the programmer wants the learner to be able to do are "critical understanding," and it is doubtful that any two people would agree on the meaning of this term. Certainly, the term does not tell a learner how to organize his own efforts in order to reach the objective.

Here is an example of the more appropriately stated objective:

When the learner completes the program of instruction, he must be able to identify by name each of the controls located on the front of the Target Tracking Console.

What words tell what the learner will be doing when demonstrating his achievement of the objective? The words "identify by name." The objective communicates to the learner the kind of response that will be expected of him when his mastery of the objective is tested.

The way to write an objective that meets the first requirement, then, is to write a statement describing one of your educational intents and then modify it until it answers the question:

What is the learner DOING when he is demonstrating that he has achieved the objective?

SUMMARY

1. An instructional objective describes an intended outcome rather than a description or summary of content.

2. One characteristic of a usefully stated objective is that it is stated in behavioral, or performance, terms that describe what the learner will be DOING when demonstrating his achievement of the objective.
3. The statement of objectives for an entire program of instruction will consist of several specific statements.

4. The objective that is most usefully stated is one that best communicates the instructional intent of the person selecting the objective.

Examples of Educational Objectives

1. Write a composition with a single tonal base.

2. To know how Greek civilization has affected the contemporary world.

3. To know how militarism and imperialism have been of causal importance for the world wars.

4. To develop a knowledge of how hereditary and environmental factors interrelate to influence the development of the individual.

5. A knowledge of the forces, past and present, which have made for the increasing interdependence of people all over the world.

6. Knowledge of the features of various forms of business ownership.

7. Knowledge of the techniques and methods used by scientists in seeking to answer questions about the world.

8. To become familiar with the plant illustrations of the principal laws of heredity and evolution.

9. To understand the structure and organization of Congress.

10. Skill in interpolation where there are gaps in data.

11. The ability to differentiate value judgments from predictions of consequences.

12. To develop some skill in applying Mendel's Laws of Inheritance to experimental findings on plant genetic problems.

13. Ability to distinguish a conclusion from statements which support it.

14. Ability to distinguish cause and effect relationships from other sequential relationships.
15. Ability to recognize the point of view of a writer in an historical account.

16. Ability to tell a personal experience effectively.

17. Ability to write simple material compositions, as in setting a short poem to music.

18. A sense of responsibility for listening to and participating in public discussions.

19. Develops a tolerance for a variety of types of music.

20. Listens for rhythm in poetry or prose read aloud.

Above taken from: *Taxonomy of Educational Objectives*, Bloom, Masia and Krathwohl.
A HISTORICAL APPROACH TO EDUCATIONAL OBJECTIVES

The history of education in the United States which is European oriented, is well known by all contemporary American educators.

We admit that many contemporary educators have little patience with a study that digs into the past to reveal something we already know. However, many principles and objectives set forth by the early architects of education are quite modern and should be considered in modern planning techniques. For example, Froebel, Rousseau and Pestalozzi's fundamental principle was that the child, just as a plant, unfolds from within, provided it has the right environment to guide its growth.

Froebel was strong in his concept of the unity of the individual's self with society and the universe. He placed the chief emphasis on children's spontaneous play in which they expressed themselves actively, combined with games, creative work, imitation of adult activities, songs and stories. Although Johann Friedrich Herbert was a German professor, many American educational heroes like Frank Murray were influenced by his approach to educational objectives.

His approach included the cultivation of character and a sense of social morality. He rejected traditional approaches in favor of the unity of mental activity, stimulated by presentations as ideas which are apperceived or assimilated to existing ideas and reach out for new ideas. The process of apperception as he believed, could only be started if the pupil was motivated by interest; the educational tasks of architects of educational structures, then is to promote many-sided interests. To realize these objectives according to Herbert, the teacher is the director of learning. Mental activity rather than memorization must be stimulated through the harmonious development of interests to strengthen the intellect, will and emotions, as the foundation of social character.

May we reiterate here that the purpose at this point is not to present a mere historical analysis of education in the United States or elsewhere, but rather to present educational objectives as discovered through research and study by the thinkers in education who attempted to influence educational planning in the United States and to show how the architects of educational structures strayed away from these objectives.

We take the position that many of these objectives are modern and sound; that we need to reach back in the bag of objectives propounded by these thinkers and utilize them to help set up
philosophical patterns by which we can proceed to set up modern behavioral objectives for today's elementary child.

May we reach back in the old bag and pick out the work of G. Stanley Hall, who was perhaps influenced by Wilhelm Wundt of the University of Leipzig who was an experimentalist in psychology.

Hall's interest was in the individual child and his own interests and ability.

This does not sound like early 19th century studies; rather, it sounds like a 1970 conference on children and youth in which individualized instruction would be the topic on the agenda.

Hall's work was devoted to concern for the national and economic well-being of the child. He waged war against mere accumulation of unrelated and meaningless facts. His work concerned itself with the learning process in which the educator was to study the child and to understand the nature of learning. It was concerned with meeting the needs of the child by studying his behavior and thus setting up behavioral goals. Should not our modern objectives do the same?

Some modern educators will disagree with John Dewey and many of his contemporaries also disagreed with him.

We adhere to the premise that there was not too much difference in the general objectives of Dewey and his contemporaries or perhaps some would say his adversaries. The differences perhaps lie, for the most part, in their procedures.

Dewey felt that educational objectives could be reached through the free and natural development of the child according to his interests.

In our opinion, we feel that many deserving and well-intended planners of education misunderstood Dewey at this point. This was interpreted by many to mean, let the child wander into meaningless, patternless journeys in planning, direction and objectives.

We believe much time is lost in the latter approach through aimless wandering and do-nothing experiences that lead to know-not-where.

We do believe that Dewey meant this, for he iterated that "all education proceeds, by the participating of the child in the social consciousness of the race." Many of us remember his philosophy of.
pragmatism which he referred to at times as instrumentalism and experimentalism. His interest in individual child development was paramount. He felt that education is life and should not merely be preparation for life. He was against passive rote learning.

Dewey's criticism of his own philosophy bears out what was said earlier in this discussion of Dewey; however, again his criticism was centered around procedure and approaches rather than objectives. His criticism, as most of us remember, brought into focus the community school concept.

We believe that an in-depth study of Dewey's philosophy and ideas will help in our concern for enabling objectives and changes in educational objectives.

During the 1940's and 1950's, criticism against education began to fall thick and fast. Some critics blamed Dewey for weakening the school systems with his progressive educational philosophy.

The efforts of Bruner (Process of Education) with his concern for the learner's understanding and appreciation of the idea of "concepts" and "principles" moved teachers to take a new look at both curricula and instruction. The impact of Bruner was felt in the rewriting and revamping of teaching materials in such a way that they were individualized to meet the capacities and different abilities of learners at different grades in the school. At the same time, educators were beginning to take a deep look at and appreciate the studies and works of the noted Swiss child psychologist, Jean Piaget, and his observations of young children and their development of intelligence. Further translations of these concerns for individuality and the human personality were later seen in the efforts of educators like Bloom and Krathwohl to develop the concept and rationale for "behavioral objectives" in all areas of the children's curricula.

In 1957, Sputnik I shook our nation to its boots. It struck, temporarily at least, a death-knell to child-centered objectives. It finally aroused the public and hence the National Defense Education Act was quickly passed in 1958.

Federal grants provided money for equipment, supplies and additional personnel needed for education.

We feel that at this point educational objectives began to shift back to subject-matter centered situation. Educational objectives were concerned with science, mathematics and foreign language. The United States' chief concern was a race with Russia. The United States felt that it would be disastrous to let Russia get to the moon and the public began to put the blame on the schools.
The rallying cry was for pursuit of excellence by educators. Many people took that to mean heads stuffed with facts or the preparation of "walking encyclopedias," the ushering out of scientific and mathematical geniuses. Educational objectives were concerned with education for the gifted, the academically talented.

The average student and the slow learner were not entirely forgotten, but their concern was diminished.

Although American education, as stated, is heavily European oriented, the disadvantaged began to resist it, since it was void of decent references to the contribution of blacks in America and Africa. In fact, many blacks contended that, much of American history was not only offensive but ridiculous. It revealed, they say, a glowing and beautiful picture of exploitation and pillage in areas where Europeans had no business. Words like "Discovery," "Exploration," "New Work" were utilized to cover up imperialistic practices of Europeans.

The hue and cry was for black studies. Educational architects began to alter their objectives to include black studies. The pressure was too great not to consider, though token it was in many places. Today in many school systems, the black studies program has gradually moved to the elementary schools.

Black students and black educators began to wake up to what had happened to them. They saw their condition, though rather late, which was administered in track-centered schools, industrial schools in the North, one and two teacher school programs by women in the South.

The press began to reveal comparative data results of black and white institutions of higher learning without presenting the causes.

It should have been mentioned earlier and perhaps may not be out of place here to mention the writings of Booker T. Washington, which were rejected by so many blacks.

The entire program of Black Studies has been inadequate. All of the textbook materials in the public school needs to be re-written to present the historical truth to the public of the contributions and achievements of all peoples.
Educational objectives in the United States which we have observed here have undergone phenomenal changes; let us consider some modern educational objectives.

Since we have accomplished one of our national goals—and we believe we did this in spite of our quest for excellence approach—that is getting to the moon; and since we seem to be on our way to other planetary worlds, we believe education is slowly returning to the child.

We can see this in the federal free lunch programs that will encompass more children deep in the heart of disadvantaged America. Our emphasis on child-centered education since our "law and order" deal seems to be failing. Drug abuse crept into our elementary schools while we were preparing for moon trips. The 1970 census revealed a population jump and the President of the United States has signed a bill to reduce the population, since birth control methods such as pill pushing efforts in the black ghettos are not working.

We believe that elementary educational objectives should be as follows:

1. to attain wholesome physical, emotional and mental health for each child;
2. to become efficient in the tools of learning—to lead, to communicate and to think intelligently;
3. to grow in the understanding and meaning of democracy;
4. to learn how to analyze critically democratic institutions and the promotion of democratic institutions;
5. to understand the social and physical environment of which he is a part;
6. to meet and solve problems intelligently;
7. to develop worthwhile recreational and creative interests;
8. to develop his best powers and potentialities.
The above stated objectives were influenced by the Educational Policies Commission in their "Purposes of Education in American Democracy." These objectives were: Self Realization, Human Relationship, Economic Efficiency and Civic Responsibility.

All students in education are acquainted with these objectives and they are mentioned here as a guide for area objectives as we believe them to be.

As stated above, these objectives are presented as a result of in-depth studies of educational objectives as viewed by our department; as a result of studies in childhood behavior through lesson demonstration.

We were sensitive to the needs of children as we observed them and have geared these objectives to them. Our studies have revealed students' potential and their ability to share in planning, to create and to aid in the enrichment of their own lives.

**Elementary Science**

In our consideration for science education for the elementary school child, we have discovered the trends in science teaching which are focused on the why of science rather than the what.

The reason, perhaps, for this trend is due to the rapid explosion of scientific knowledge or information and the expanding computer industry.

**Illustrative Behavioral Objectives in Science:**

1. Name five principal parts of the human cell and give one function of each part.

2. Cite at least six reasons why our government (federal, state and local) is concerned about the problem of air pollution.

3. Demonstrate by a drawing or experiment how the buzzer on our classroom door works.

The following six emphases in science education tie in with the general objectives of science education for the elementary child as discussed in politics for science education:
1. To help children develop concepts, principles and realizations of value to them in the understanding and solving of their problems.

2. To help children cultivate scientific attitudes, such as critical mindedness, willingness to act and seek reliable evidence, and intellectual honesty.

3. To help children acquire or develop scientific ways of working, including planning intelligently, observing carefully, and forming tentative conclusions.

4. To help children explore new interests which will lead to the satisfactions of discovery.

5. To help children acquire those skills and techniques necessary to gain further information, such as reading science content with understanding, making accurate observation of events, and performing various science activities.

6. To help children develop social attitudes and appreciations needed in a democracy, such as growth in social behavior and willingness to assume adequate roles in present and future society.

**Language Arts**

The Language Arts Program is sequentially structured in the elementary school program for most of the schools in North Carolina. It is repetitive and recognizes the existing differences in linguistics. It also accepts the language of the individual child and allows him a place in the program irrespective of his level of achievement.

We feel that the above statement should be true more with language than perhaps with other phases of the Language Arts Program; other phases being reading, writing, literature, composition and spelling, speaking and listening. We suggest that in these cases, a plan be set up to determine the level of the child and that the teaching program start with where he is at that level and move to another level at his own pace. This will call for group and individualized instruction.

**Illustrative Behavioral Objectives in Language Arts:**

1. To be able to give an oral report concerning a selected book recently read.

2. To take an active role in a dramatic play.

3. Write a letter of application for a selected job.
Health Education

We take the position that Health Education deals with the total child—physical, mental, social and intellectual. In other words—it deals with life.

We feel that the program must be comprehensive, concentrated, and based on needs, interest, and developmental levels of students. The three broad areas include health instruction, health services, health environment and safety education.

Illustrative Behavioral Objectives in Health and Physical Education:

1. Explain the proper first aid procedures to use with your friend who has just received a severe cut on his left thumb.

2. Execute twenty-five push-ups by January 15 of the school year.

3. (Health permitting) Participate as an active player in basketball, according to the rules of the game.

Physical Education

We believe that Physical Education should be a sequential program in the elementary school. The program, we think, should be purposeful activities based on the developmental level, needs, capabilities, and interests of all students involved. The program should be designed to help each child develop and maintain skills, concepts, and understandings which will enable him to function efficiently and effectively in all of his life experiences.

Objectives:

1. To provide opportunities for cooperative planning of developmental activities which provide opportunities for each student to achieve his full potential.

2. To provide opportunities for maximum participation in an instructional skill program which is appropriate for readiness, interest, and ability levels of all children.

Mathematics

Mathematics is a good medium to develop the intellect. To make for growth in living, the individual needs to acquire the art of thinking and planning.
Illustrative Behavioral Objectives in Mathematics:

1. Put the following worded problem into a formula and explain how you would solve the problem as you work to arrive at an answer:

"We traveled 350 miles of our trip the first day in 6 1/4 hours. How long will it take us to complete our total trip of 1235 miles?"

2. Solve this problem: Dick took a trip with his parents to Death Valley, California. A sign there said that the desert plant called "mesquite" will grow in soil that has up to 0.5% salt. How much salt would there be in one ton of soil with this much salt?

3. Explain and illustrate the following formula by which we find the volume of a box:

\[ V = l \times w \times h \]

Illustrative Behavioral Objectives in the Fine Arts:

1. Name five composers of classical music in the twentieth century, and give the name of one work for each composer named.

2. Illustrate a knowledge and skill of perspective through one free hand drawing or painting.

3. Write the musical notations on a scale for a song which you compose yourself, and write one stanza of lyrics to accompany the song.

Social Studies

We think that the Social Studies area is the one area in which all other areas mentioned in this report can pivot. High correlation of values are a part of the Social Studies area.

The scope of this area is broad and conducive to citizenship training. It makes for group planning, pupil-teacher planning, research, character education and has high creative and correlative values.

We recommend the unit plan of teaching in this area more so than any other; mainly because of its uniqueness; its quality for pupil growth and maturity and its possibilities for self-discipline and individualized instruction.

The scope of teaching in this area and the utilization of the unit plan are broad enough to provide latitude for the gifted to grow and provide opportunities for the slow learner to develop at his own pace.
We highly recommend the self-contained classroom as the best means through which the objectives of this area can be implemented. We believe that the self-contained classroom programs are more conducive to a child-centered emphasis.

Illustrative Behavioral Objectives in the Social Studies:

1. Explain in writing the Bill of Rights of our Constitution in terms of what it means to education in our country.

2. List at least six ways in which the executive branch of our federal government is like the executive branch of the North Carolina state government.

3. Write a creative term paper on your reasons why or why not the President's Cabinet should be reorganized according to the suggestions of President Richard M. Nixon.

We believe that, though much of these suggestions may be irrelevant for our times, salient features are quite modern and workable and further, we suggest the adoption. We have utilized many of them in this report.

We recognize the outstanding contributions of other educators, not recognized in European and American historical literature in a course called, "History of Education" but whose works are outstanding and helped us to organize some objectives in this report that we feel important.

We agree with the Task Force on Environment and Natural Resources* on the definition of behavioral objectives: "Behavioral objectives are a clear statement of specific behavioral changes which the teacher is attempting to bring about in students through instruction, and participating in the appropriate activities."

As background for obtaining some of the objectives, we determine the behavior of students through observation and demonstrations. This was done to establish needs.

Finally, an in depth study of literature from the State Department of Public Instruction of North Carolina and other resources helped us to raise the level of objectives, as we see them, for various areas of learning in the elementary school and in agreement with those in our proposal.

*Teacher Guide for Environmental Education, prepared by The Task Force on Environment and Natural Resources in cooperation with the North Carolina Department of Public Instruction, 1970, p. 4.
INTRODUCTION TO DEMONSTRATION

Since we believe that behavioral objectives are aims at the main target, our demonstrations were set up to develop them and to gear the performance tasks to the realization of these objectives.

We also believe that the accomplishment of the behavioral goals make for the accomplishment of the objectives.

The consideration of salient features of objectives of elementary education as presented by researchers in the field both in Europe and Africa, along with the study of objectives as presented by the North Carolina Department of Public Instruction have enabled us to promote a child-centered philosophy responsible for organizing behavioral objectives set forth in this report.

Our philosophy is opposed to subject-matter centered programs for the elementary child, since we believe they make for dull, listless, joyless, drab, stagnant programs. Subject-matter situations, we believe, emphasize drills, recitations, rote teaching, memory techniques. This program is a teacher-telling, teacher dominating, learning-for-learning sake type of experience, and we believe such a situation contributes to "drop-outism," crime and neglect.

The demonstrations herewith presented were geared to exciting behavioral performances that developed interests, motivated thinking, improved the intellect and body. They also made for citizenship training and a desire for the continuation of individual efforts.

Cooperating teachers were helped and many students asked for more demonstrations even though our time limit had expired.
Lesson I--Presenting an Approach to a Unit and Pupil-Teacher Planning Experiences

Grade--Eighth
Area--Social Studies

General Objective--To motivate students to assist in the planning of unit.

Behavioral Objectives

1. Select three books out of the library and with their use write a seven-page research study on one of the following topics related to the period of our study:
   a. Life on the Frontier
   b. Farming Beyond the Mississippi
   c. New Inventions During the Birth of our Republic
   d. Transportation in Frontier Days
2. Using five minutes, give an oral report of the story you prepared in one above.
3. With four or five other students on your Project Committee, prepare a ten minute skit. Try and make your presentation as realistic and authentic as you can. The Project Committee will be evaluated in terms of (a) the narration of the skit, and (b) presentation of skit before the total class.

Background Activities

Sub-topics:

1. A new Republic is Born
2. Life on the Frontier
3. Land Beyond the Mississippi
4. Settlers in the Far West
5. Expansion and Exploration
6. Trouble with Other Nations
7. New Inventions Start New Patterns
8. Moving Westward
9. Beyond the Mississippi
10. The Push to the Pacific
11. Factory, Farm and Plantation
12. Expanding Democracy in the Age of Growth
Step I. The Approach--The showing of a film titled "Life on the Frontier."

Step II. Planning Period

Performance Task One.

Students were requested to think and to raise questions. Questions like, "What more would you like to know concerning the growth of America toward the West?" The question was put more simply into a series of smaller questions.

The response was great. About 40 questions were raised (Questions in Demonstration Two).

A student was selected to write questions on the chalkboard. One was selected to record questions.

Performance Task Two

Students made records of questions and statements.

Outcomes

1. Response great.
2. Eager-beaver attitude was developed.
3. Students' questions were in line with material (Texts, Supplementary material and library books and materials).
4. Questions were in-depth and changes were at a minimum.
5. Teacher direction was helpful.

DEMONSTRATION II

January 6, 1971

Grade--Eighth

Area--Social Studies

General Objectives--To teach students how to organize material for individual and group action and to provide opportunities for pupil-teacher planning.

Behavioral Objectives

1. Select at least three books in the library and use them in writing a seven-page report on one of the following topics:
   a. Farming in the Early West
   b. Transportation in the Early West
   c. Communication in the Early West
d. Community Life in the Early West

e. Indian Life in the Early West

2. Orally, give a prepared five-minute report to your class of the written report you prepared in one above.

3. Present in writing to your class planning group a list of the points of interest you would like to take in on our Williamsburg field trip.

4. Travel with your class to the North Carolina State Museum and view the Indian artifacts and folklore there, and in class the next day present in writing a two-page report of your evaluation of the trip.

Procedures

Step I. Recall the film that was shown at the last class meeting.

Step II. Browse quickly through the books and chapters on the subject. (Teacher will indicate chapters.)

Step III. Add some statements or questions you think we omitted. (Read first the ones we did in the last class meeting).

Step IV. We will spend five minutes to list more.

Step V. Let's divide questions and statements into large areas.

Step VI. Let's divide ourselves into groups according to our own interests.

Performance

A. Criteria

1. Participation
2. Group action
3. Interest
4. Vigorous response

B. Performance Task One. Students were requested to do steps I - IV and think how large area topics can be developed. The instructor prepared the first one as a guide and direction.

1. Topics developed by the teacher and class
   a. Farming in the Early West (suggested by teacher)
   b. Transportation and Communication in the Early West
   c. Community Life in the Early West
   d. Indian Life in the Early West
C. Performance Task Two. Step VI was performed. Pupils divided themselves into five groups according to interest. Students selected the group they wanted to serve on as far as possible. After the organization, everyone seemed happy with his selection.

D. Performance Task Three. Step VII was performed. Students were requested to consider the materials and visualize how they were to accomplish their performance tasks. They listed "things we would like to do." This required much thought, planning and group action, some long ranged and some short ranged.

**Group Two**

We would like to make a large pictorial relief map showing land-water routes out of paper mache.

**Group Four**

Take a trip to Williamsburg
Make a small town scene
Examine different things
Take a trip to Old Salem

**Group Five**

Make tepees
Visit museum
Make Indian costumes
Make reports on Indian life

**Performances Planned**

Topics assigned to groups (topics were developed in Demonstration I and organized into areas in Demonstration II).

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**DEMONSTRATION III**

January 6, 1971

Grade—Eighth

Area—Physical Education

Lesson—Rhythm and Creative Dancing
General Objective--To provide opportunities for creativity in rhythm and dancing.

Behavioral Objectives

1. Demonstrate with your class the minuet to the accompaniment of music provided by the music teacher.

2. Describe orally to the class the minuet and tell five events in its early historical development.

3. Write a comparison of the minuet with any two styles of dancing today.

Procedure: Read a Historical Development of the Minuet

A brief Historical Development of the Minuet

The Minuet is a graceful and stately dance of French origin, the name of which derived from Menu, small, was suggested by the little steps.

The Minuet was introduced in Paris in 1650. It was first a gay and sprightly dance; but after appearing in Court it became very dignified.

The Minuet was a great favorite of the Court of Louis XIV, and was equally popular in the contemporary Court of Charles II in England.

The Original Court Minuet was a simple dance, although it did not retain its simplicity for long; it was elaborated and molded into a beautiful cultivated form—the perfect expression of an age in which deportment was carefully cultivated, manners were polished and bodily grace developed to the highest degree. The many slow graceful movements, the bows, the pauses to be filled make for a beautiful dance.

Performance

A. Criteria

1. Participation
2. Group action
3. Interest
4. Vigorous response

B. Performance Task One. Listening Skills

Students were requested to listen to the entire selection first. Students were asked if they could recognize movements.
C. Performance Task Two. Thinking Skills

Students were asked to think of the steps they could develop. Selection was played over and students were asked to raise their hands at the end of the first movement.

Students were requested to suggest steps for the first movement. Students performing at the record player were requested to repeat movements as students listened and thought and a student leader (boy) emerged and demonstrated some steps and movements. He was an excellent leader and he exercised his creative skills well. The leader asked for volunteers to join him. One girl joined him. Later two more and later two more. The six or more students presented an excellent demonstration in coordination, rhythm and steps. The bell rang and this prevented others from joining. Students requested a continuation for the next day. Teachers were enthusiastic and kept the record.

Outcomes

Body coordination was enhanced. Thinking, listening and imagination skills were developed. Rhythm, attitudes, leadership and followship skills were enhanced.

DEMONSTRATION IV

January 7, 1971

Grade--Eighth

Area--Physical Education

General Objective—to provide more opportunities for creativity in rhythm and dancing.

Behavioral Objectives

1. Participate in dancing the Minuet with two groups of people in your class.

2. With three other students you select in class, create a dance pattern out of the Minuet. Demonstrate the new pattern and describe it orally to the class.

3. Bring to class one of your favorite dance records, and with other students demonstrate your interpretation of the Minuet to your selected recorded music.
Lesson Approach

The leader told the teacher that he had thought out some more patterns and wanted to teach them to the class.

Performance Task One

Students were arranged in a dance pattern thought out by them.

Performance Task Two

Other dance pattern arrangements were developed.

Outcomes

1. Response exceptionally good.
2. Some boys were shy. Some boys and girls did not choose to participate.
3. The majority of the class responded.

Evaluation

1. Some students begged for more experiences of this type.
2. They wanted modern dance records.
3. They wanted faster music for more vigorous steps and exercises.
4. This should lead to more planning with students.
HIERARCHY OF CONTENT FOR PHASE II OF THE EDUCATIONAL PROJECT

Our interest in Part II of the Educational Project, "An Innovative Project to Motivate Seventh and Eighth Grade Students in Selecting Learning Activities," grew out of our study over a two-year period of nine models dealing with elementary education. Several of the models were closely related to our selected innovative project.

In Part I of the Educational Project, we developed a model that was specifically related to the elementary education program at Shaw University. The most practical and saleable features of the nine models were used in its development.

As a result of an in-depth study of the nine models, it was decided that teacher competence and teacher performance can best be realized through pupil-teacher planning and selection of learning activities. "An Innovative Project to Motivate Junior High School Students in Selecting their own Learning Activities," was launched.

After some consideration and long discussions on the organization of the school systems in surrounding areas, it was decided that the project should include only seventh and eighth grade students.

The rationale for this model was drawn from features of the models studied. An individualized approach to meeting the educational needs of learners is a demanding pursuit which requires the skills and resources of the entire profession. Unilateral action can no longer be tolerated. It demands a new coalition and team partnership of all educational resources including school districts, universities, teacher organizations, the community, and state agencies. An individualized approach in accommodating the human variable in learning demands an effective partnership between the learner and the teacher, and requires more interaction between the two in terms of affective factors. Present signs of alienation, rebellion, discontent, boredom, and apathy clearly point to a serious need to provide an educational practice more compatible and consistent with what we now know about human nature and learning. Thus, this project gives credence to an individualized approach in education which treats people as people rather than as objects, an approach which relies more on intrinsic motivation and self-discipline rather than extrinsic controls and stimulation.

This project supports the challenge to practice individualization in a fashion that will encourage learners to be planners and directors of their education. Implementation of this project further supports the practice not only of individualizing instruction but of utilizing a procedure of working with learners in planning, executing, and evaluating their total learning experiences.
The rationale underlying the decision of the project personnel to deal with the individualized approach has much support from empirical evidence gained from studies of learning. Such empirical evidence reveals that individuals tend to learn better when they:

1. Actively participate, rather than passively receive the learning experience.

2. Have an opportunity to participate in the selection of what they learn.

3. Have an opportunity to know the results soon after their responses are made (reinforcement and motivation studies further support this).

4. Experience success which is most likely to occur when learning tasks are matched to the individual's capabilities and need for challenge.

5. Are expected to succeed.

6. Work on learning tasks which are matched to their dominant learning pattern and style.

7. Work at their own rate or pace in which they have an opportunity to determine.

In designing and planning this project, project personnel felt that the choice of planning with learners requires a great deal of trust in them. They also were of the disposition that learners like to work when their goals are relevant and worthwhile in their perceptions, and when they are not externally pushed and forced in order for them to grow and develop. Project personnel also believed that the learners will be (or will become) rational and objective in analyzing and assessing their strengths and weaknesses and in choosing those experiences to fulfill their potentialities when they are given the opportunities. For ages now, educators have been strong on dialogue but weak in practice in espousing this concept.

This project proposed to bring about a greater awareness of both learners and teachers and school administrators of the need for individualization in the performance of the students' total learning processes and experiences, and to propose some strategy by which educators in the schools can go about planning and working with each student's program of study, and day-by-day experiences, which are tailored to suit the individual student in a performance and competence based program. In terms of this project, "individualization" was understood to mean planning with students, rather than for them, as part of their own self-development through which they gain new insights into their own behavior and where the elements of self-respect, self-awareness, and confidence are emphasized as they relate to each learner's unique interests and needs.
Based upon the premise that an individualized approach to meeting the educational needs of our youth is related to all his experiences and not just those confined within the classroom or school, this project was designed and implemented by a coalition and linkage of many resources in addition to the traditional formal school, including personnel and resources from the Shaw University, the Wake County Board of Education, two public junior high schools, and state and federal agencies.

Several strategy meetings were held to decide upon the hierarchy of steps to be followed in enabling project personnel to meet the following objectives which were chosen for the project.

1. To provide an experimental approach to teaching and learning.

2. To help teachers to provide enriched learnings to seventh and eighth grade pupils.

3. To help teachers provide learning experiences that will make for maximum growth and development that will lead to life adjustment and life enrichment.

4. To provide learning experiences which will help pupils discover their talents and share them with others in the making of an improved society.

5. To help students to discover new and untried learning activities which will lead to wholesome attitudes, good human relations, and maturity in living and learning.

The hierarchy of steps identified to meet the objectives of this project were included in the total package and are fully described in the completed model of Phase II.

After endorsement by the administrators of Shaw University, contact was made with officials in the Wake County Public Schools. After meeting with the Wake County Superintendent and Assistant Superintendent and discussing the objectives of the proposal, the project was given full endorsement. At this point, the County Assistant Superintendent set up a series of meetings with the Central Office supervisory staff, and the principals and guidance counselors from the two schools chosen to participate in this project. It was recommended by the principals and the supervisors that the instrument referred to in the above hierarchy steps be developed cooperatively by Shaw University staff and public school personnel. A committee was then appointed to develop an instrument to be administered to the one hundred students discussed in the project proposal. This committee was composed of one person from the Wake County Schools' Office, the two guidance counselors from schools, a counselor from Shaw University, the principals from the two participating schools, one member of the project
committee and the project director. Further, meetings were held with the teachers, guidance counselors, supervisors, and project director.

Plans were made for the administering of the S.R.A. Achievement Series Test and Gray's Standardized Oral Reading Paragraphs.

After studying several sample instruments for the purpose of getting at the interests of students in the schools' educational programs, an interest inventory was designed (see Appendix 'A' for a copy of instrument). The curricular areas included in this inventory are: Mathematics, Science, Language Arts, Social Studies, Art and Music, and Health and Physical Education. Two kinds of questions were stated to get at the nature of the interests of the participating students. (See Appendix 'a' for the two kinds of questions.) In each curricular area the student was given an opportunity to give other expressions to any additional feelings he might want to make toward each subject area.

A number of visitations were made by project personnel to the participating schools to discuss strategies of implementation of the project with the principals, counselors, and the (twenty) teachers involved. The following items were discussed in these meetings:

1. The objectives of the project
2. The various components of the interest inventory
3. The two tests to be administered (The S.R.A. Achievement Series and Gray's Standardized Oral Reading Paragraphs)
4. Methods to be used in the administration of the interest inventory and the two tests mentioned above.

The students started with paragraph one of this test and went as far as they could toward completing the twelve paragraphs. The paragraph in which the student experienced the maximum difficulty was considered his reading level as measured by this test.

Lengthy discussions were held on the feasibility of providing demonstrations for teacher and student observation. These demonstrations were based on the results of personal visits to the classroom and discussions with classroom teachers, supervisors, and counselors in the project schools. It was concluded that "esprit de corps" among all personnel was necessary to the development of the project.

It was decided that demonstrations should follow the curricular pattern of the public school curriculum as organized by the
North Carolina State Department of Public Instruction. It was discovered that the project schools follow the pattern of the State Department.

The State curricular pattern includes the following: Language Arts, Social Studies, Mathematics, Health, Physical Education, Music, Art, Science and Vocational Education Interest. These areas are integrated so as to place emphasis on child development rather than subject-matter centered.

It was discovered that most teachers are subject-matter oriented and possess little competence in child-centered emphasis which result in a "joyless educational experience" in the classroom. Joyless educational experiences make for dull and listless students, impractical, unreal, meaningless, and outmoded methods and techniques as well as tired and worn-out teachers.

Demonstration personnel were selected who well understood the problems, knew how to perform and had the competence to build a appetite for learning. In fact, the demonstrators introduced techniques and methods to enrich learning activities and at the same time motivated pupils to share in the selection of their activities and sharpen the appetite for study and make for growth and development.

Shaw University professors in the Department of Teacher Education and State Department personnel, who are experts in various areas, presented demonstrations.

Demonstrations probed deeply into the areas of their interests to discover recent trends, new goals, new patterns, new resources, etc. The study included research as discovered in current journals and college supplementary and textual literature.

A meeting was held with classroom teachers to mark the beginning of cooperative educational planning between project personnel and the classroom teachers.

The subject of the first meeting was "How Can Seventh and Eighth Grade Pupils be Motivated in Selecting Learning Activities in Various Learning Areas?" It is felt that the same topic would prevail in subsequent meetings.

At the beginning of the first meeting, project personnel discussed the value of student participation in selecting their learning activities. The following points were considered in the presentation:

1. Student sharing as related to student needs
2. Student participating as related to mental and academic maturity

3. How pupil sharing in selecting learning activities makes for depth in learning

4. The importance of developing a "we" attitude in learning and living

5. How democracy in planning and programming makes for worthwhile citizenship training.

In order for this type of learning experience to be successful, it was presented to the pupils themselves in the early stages of planning and development. This gave students the opportunity to share in the planning, perhaps at the beginning stage, which would develop pride and worth in the project.

A Charrette type of planning experience was forthcoming. The main purpose was to set the stage for meaningful learning experiences that, hopefully, would take place during the duration of the project and even perhaps thereafter.

The purpose also was to help students discover other learning experiences that were in store for them. Further, the purpose was to seek the cooperation of students for innovative ventures.

The Charrette was to reveal the character and relevance of effective learning experiences and to point out how these experiences were related to worthwhile citizenship.

The "why" of learning was to be paramount, and it should open up vistas of learning that would widen the horizon of living and should help students to visualize learning as a tool to build a society conducive to productive living.

Below are points that were considered in the Charrette session. These points tend to lead the thinking of students beyond the walls of the classroom; even beyond the times in which they live. In higher education the question here would be "Education for What?" Points to be considered:

1. Should school health experiences be conducive to building a strong body related to maximum living and life longevity?

2. What are some of the "goings on" in the community that affect education?

3. What are some of the "goings on" in the community that affect the lives of students?

4. Is the learning taking place contributing to an understanding of these "goings on?"
Some possible outcomes of a Charrette type of learning experience:

1. Reasons why various areas of learning are a part of the school curriculum. The reasons are associated with life goals and students should discover them. The discovery of these life goals are not beyond the intellectual ability of students at the grade level considered.

2. Identify some possible irrelevant learning experiences which are time-consuming associated with previous classroom activities.

3. Students are more mature in their learning attack.

4. Point up needs, perhaps, for more Charrette type of learning experiences.

Attempts will be made to guide this innovative project experience so that the outcomes mentioned above will be realized. These outcomes are necessary in the educational process due to the following discoveries:

1. Self-discovery of educational goals makes education more practical and meaningful.

2. Participatory learnings make for a maturity needed for growth and development in learning.

3. Cooperative goal seeking experiences make for sharing of individual ideas which are needed not only in planning for new and untried experiences now, but have carry-over values in the construction of a better society of which students will be a part in the not too distant future.

4. Contributions from each student are important to his growth. Contributions from the most timid are important to the development of the group. The worth of the individual is significant and must be shared if progress of the group must be realized.

A pupil-teacher-consultant relationship is important to the success of the experiment. All should get to know each other and should work toward common goals.
The following facts are conducive to mutual relationship needed for progress:

1. There are no experts as such in this experimental learning project; therefore, all concerned should work together in the experimental process.

2. Experimental learning is a continuous process in education due to changing times and shifting scenes in life experiences; hence, this and other similar projects should be a part of our educational fabric.

3. No one can ever be absolutely sure that present methods are relevant to needed goals at the present. The decision as to the best methods, meaningful goals, etc., can best be decided through cooperative educational planning and programming.

Project consultants were good resource personnel. Classroom observations and visitations were necessary for cooperative planning. "Esprit de corps" was necessary for best results in discovering new attacks and new skills.

For maximum results, it was important that a doctor-nurse-patient type relationship be established. A meeting of these three personnel areas was welcomed for all who were sharing the same goal—the physical and mental growth of the patient.

By the same token, meetings of the project consultants, teacher, and pupils were welcomed when an understanding of these goals is realized by all concerned.

It is felt that problem clinics were necessary to the development of the project. These experiences were provided so that teachers could "air" their problems. Efforts were made to assist teachers with problems they encountered during the experiment.

The following services were provided:

1. New and relevant material

2. Consultant help for problems growing out of the experiment.

A second application of the interest inventory and another form of the S.R.A. Achievement Series were administered at the end of the project. The same Gray's Standardized Oral Reading Paragraph Test was administered during the month of March.
A final meeting of the teachers and project consultants was held in March.

The purpose of this meeting was to discover:

1. What new learning experiences were discovered, if any
2. What new goals were reached.

A write up in the form of a model revealed, in print, the results of the educational experiences of the project.
MODULE
Innovative Modules For Teacher Education

INTRODUCTION

The purpose of this module is to introduce to all education majors the most recent innovations in teacher education. In addition, it is hoped that this module will make students more cognizant of the significance of the most recent advances in the role of the teacher, his place in today's teacher education and how he can best be prepared to cope with the educational problems of tomorrow and how they will affect the children of the future. As teacher education moves into the next decade, it is apparent that the program will continue to be restructured to include the constant innovations being developed and introduced. It is hoped that the components of this module will give teacher education majors a greater insight into the roles they will play as teachers in the world of tomorrow.

This module is divided into the following major component parts:

1. Pre-Service Education
2. Teaching Techniques
3. The Teacher and the School Community
4. Professional Ethics
5. Internship and Clinical Experiences
6. Audio Visual Aids

Each major component module is divided into the following components:

1. Purpose
2. Behavioral Objectives
3. Performance Criteria
4. Methods and Materials
5. Evaluation

Each professor will give a general overview of the module, including the objectives, the philosophy, the performances, and evaluation. Professors will include information on the most recent innovations as they are related to the former. Each student will be presented with the challenge of utilizing the module for his own professional performance.

Evaluations for each component part may vary slightly. However, performance must comply with standards in the total Teacher Education program. In no case is performance lower than
seventy percent (70%) acceptable. An examination will be required in all component parts of the module. In some instances, if the student's performance on the written work (term papers) is below the performance level, he will be given a second chance to do the paper over. In all other instances if the performance is not met, the student must take an "incomplete" and work beyond the semester or be recycled through the course.

All juniors and seniors will be required to read the following books:

1. **Cooperation for Better Student Teaching**, by William A. Bennie.
2. **The Role of the School in American Society**, by Thoger and Martin.
Purpose: To assess the student's readiness, sensitiveness, and awareness of the total teacher education performance.

Behavioral Objective 1

1. The student will observe a number of selected teaching situations in the public schools, and when called upon he must be able to relate to some of the common techniques of a regular classroom teacher.

Performance Criteria

1. The student will discuss his observations with a member of the teacher education faculty.

2. The student will arrange for an appointment with the principal and teacher of the school to which he is assigned.

3. The student will arrange for his transportation to and from the site of his assignment.

Methods and Materials

Lectures and seminars on pre-service education

1. Introduction to teaching

2. Teacher's Handbook

3. Films

4. Magazines, books, pamphlets and printed materials

Evaluation

1. Oral and written exams on which student will be expected to perform at a minimum of 70% or be recycled.
Behavioral Objective 2

1. The student will negotiate at least two conferences with public school teachers in a teaching area he chooses, and at the end of the second conference, present to his major professor in an acceptable written essay, why he wants to enter teaching.

Performance Criteria

1. The student will arrange for the conference time, place, and materials needed.

2. The student will keep a record of what takes place during the conference and will follow up any commitments he makes therein.

Methods and Materials

1. Student requested to read the textbook: Working With Groups.

2. A notebook, pencils and a cassette set and tape.

Evaluation

1. Oral evaluation.

2. Written examination at the end of the course.

Behavioral Objective 3

1. The student will serve as a classroom teacher's aide, and at the end of the assigned period, he will be expected to have acquired some knowledge of the instructional activities of the regular classroom teacher.

Performance Criteria

1. Upon receiving his assignment as a teacher aide, the student will follow instructions given him by the classroom teacher.

2. The student will spend a minimum of five hours during the semester serving as a teacher aide.

3. The student will arrive and depart from his assignment at the pre-arranged time.

4. The student will be responsible for notifying his appropriate college professor and school administrator when it is necessary for him to be absent.
Methods and Materials

1. Before beginning as a teacher's aide, the student will need the book: *Aide - A Guide to Help Improve the Work of Aides in the Schools*.

Evaluation

1. The student will be required to complete a check list. If incomplete, the student will be given opportunity to complete check list.

Behavioral Objective 4

1. The student will prepare a written paper of not less than 1,000 words giving documentation on why he wants to be a teacher.

Performance Criteria

1. The student will gather the information for his paper from contact with the principal, teachers, students, custodians, and actual experiences in the classroom.
2. The student will use necessary reference sources from the library.
3. The student will submit the paper in typewritten form double spaced.

Methods and Materials

1. The student will make a study of three research papers on teacher education in developing his papers. The student will read three books on teaching, including *Teaching in American Culture*. Lectures on teaching and one film on teaching.

Evaluation

1. The paper will be graded pass or fail.

Behavioral Objective 5

1. The student will make a written appraisal of his experience as a teacher aide, and must be able to outline in detail the duties of an aide. He must learn the techniques of aiding teachers.
1. The student will use as broad criteria as possible in evaluating his experience as a teacher aide.

2. The student will specify and justify the advantages and disadvantages (shortcomings) of his experience as a teacher aide.

Methods and Materials

1. Introduction by the instructor

2. Selecting materials on teacher aides, leaflets, pamphlets, books and magazines on teacher aides.

3. Films, filmstrips and slides.

Evaluation

1. The written paper and final examination.

Behavioral Objective 6

1. The student will engage in at least two micro-teaching experiences in his teacher aide assignment. At the end he must be able to demonstrate his teaching skills before an audience of college students and professors, and public school teachers and students.

Performance Criteria

1. The student will make arrangements for this experience in micro-teaching with an Audio-visual aid specialist from the college and the appropriate school official.

Methods and Materials

The most recent techniques and materials will be used in learning how to perform micro-teaching experiences.

1. Read the book *Realities of Teaching Explorations With Video Tape*.


3. Methods of Audio Visual Aides (booklet)

4. Demonstrations

5. Lectures 150 151
Evaluation

1. Weekly written examinations plus a final examination. A student failing more than three weekly exams will be recycled until he passes. The final grade will be determined by an evaluation of all the student's assignments including the final examination.

Behavioral Objective 7

1. The student will do a case study of one student in the classroom in which he is working. This will be done under the direction and with the cooperation of the teacher under which he is working. He will be requested to outline his duties for service to the student based on items in the case study.

Performance Criteria

1. The student will select a pupil for the case study in conference with, and with the consent of his classroom teacher.

2. The student will treat the information gathered for the case study confidentially.

3. The student will use prescribed case study forms (same as was prepared in the methods class and Educational Psychology classes.)

Methods and Materials

1. The student will use the most recent materials and techniques on case studies.

Evaluation

1. A successful classroom demonstration as a teacher aide will be presented. A conference on the demonstration will be followed.

2. An acceptable written case study. Significant aspects of the case study service experiences will be presented to the class.

Behavioral Objective 8

1. The student will have a conference with at least one principal or supervisor, after which he will state orally and in writing the administrative and supervisory input of the conference.
Performance Criteria

1. The student will make arrangements for a conference at an appropriate time with the administrator.

2. The student will submit a typewritten paper on the results of the conference.

Methods and Materials

1. Introduction

2. Cassette and Cassette tape

3. Lectures

4. Methods of interviewing

Evaluation

1. Student must be able to demonstrate orally and in writing his ability to give feedback from conferences with administrators. A written examination will be given.

Behavioral Objective 9

1. The student will visit one urban school and one rural school, and when presenting simple subject matter, he must be able to discuss the major components of a good teaching situation in each school setting (urban and rural).

Performance Criteria

1. The student will select the schools for his visits and observations with the approval of his advisor or major professor.

2. The student will make arrangements in writing through his advisor to visit the schools.

3. The student will arrange for transportation to and from the school. The student will seek the assistance of his advisor in arranging for his transportation.

Methods and Materials

1. Materials from two books will be used in the component of a good teaching situation: The Teacher and School Organization and The Teacher and the Public School System.

Evaluation

1. Written final examinations, and one term paper.
Behavioral Objective 10

1. The student will preview and report on one film dealing with the role of the teacher; also he must read and report on one book, after which he must demonstrate in class the influence of the film and book upon his desire to become a teacher.

Performance Criteria

1. The student will preview and report on the film, "A Child Goes Forth."

2. The student will set up and operate all audio-visual equipment.

3. The student will restate orally to the class the powers of the role of the teacher

Methods and Materials

1. The student will utilize the projector and screen in showing the film, "A Child Goes Forth."

2. The student will read an assigned reference on becoming a public school teacher.

Evaluation

1. The student will be evaluated on the basis of his competency and skill in handling the required assignments.

2. The student will participate in an oral appraisal of his ideas concerning a successful school teacher, and will be rated "pass" or "fail."

3. The student will be evaluated by personal observation by his major professor or advisor, and written assignments.

4. An instrument will be devised to assess student's overall attitude toward the role of the teacher.

5. A written evaluation will be required of all students on which they must answer a minimum of 70% of the questions. A student scoring lower than 70% of the questions will be recycled.
Purpose: To provide innovative methods and techniques which will enrich the teaching and learning experiences.

Behavioral Objective 1

1. The student will read assigned materials dealing with the most recent teaching methods and techniques and, when presented the subject matter, he must be able to critically discuss orally and in writing some of the modern methods and materials.

Performance Criteria

Each student will be given a bibliography and list of materials on methods and techniques necessary for completion of the course. The student is required to read the following:

1. *This Is Teaching*, by Haskew and McLendon
2. *Better Teaching*, Alcorns
3. *Introduction to Teaching*, by Peters, Burnett and Farwell
4. *Taxonomy of Education Objectives*, by Bloom
5. State Department of Public Instruction, *Teaching in North Carolina*
6. A set of assigned lesson plans
7. A set of state adopted textbooks
8. A set of teachers manuals
9. *Teaching Social Studies*
10. *Strategies for Reading in the Elementary School*
11. The *Teacher's Handbook*
12. One film on teaching
13. Two magazine articles on methods of teaching.
Methods and Materials

1. The student will use current information such as articles and research on the innovative teaching methods and techniques.

2. The student will use textbooks, including identified references on behavioral objectives.

3. The student will use library books dealing with professional education.

4. The materials listed under "Performance Criteria" are acceptable for methods and materials.

Evaluation

1. The student will be graded "pass" or "fail."

2. Term paper

3. Two exams during the semester

4. Final examination

5. Final evaluation will be based on term paper, term grades, demonstrations and final examination.

Behavioral Objective 2

1. The student will acquaint himself with various types of lesson plans, and demonstrate their use in actual teaching situations. The student will prepare lesson plans under the supervision of his major professor and method teachers.

Performance Criteria

1. The student will prepare course outlines or syllabi for a subject matter or discipline of his choice.

2. The student will do research in at least one subject matter discipline in his major, under the supervision of his major professor, advisor, or method teacher.

Methods and Materials

1. The student will study copies of assigned lesson plans. The student will acquaint himself with resources containing course outlines, syllabi, and methods of preparing course outlines and syllabi.

2. The student will use books which contain lesson plans and methods for preparing lesson plans.
Evaluation

1. The student will be evaluated on the written assignment and recitation in class. Student must repeat the performance until he succeeds in making an acceptable lesson plan.

Behavioral Objective 3

1. The student will become familiar with a public school register, a cumulative folder, a health card, and any other pertinent records related to the duties of the public school teacher.

Performance Criteria

1. The student will visit an assigned public school principal's office to study his filing system and secure a copy of each of the above-mentioned records.

Methods and Materials

1. The student will study materials that deal with interpreting personal, social and academic data.

Evaluation

1. Evaluation will be based on oral and written examinations.

Behavioral Objective 4

1. At designated intervals, the student will do demonstration lessons on a specific grade level. The student must be able to select and demonstrate materials in all the subject disciplines taught at the specific grade level.

Performance Criteria

1. The student will present the plan for his demonstration lesson to the major professor or advisor prior to the day of the demonstration.

2. The student will select and assemble necessary materials and information for his demonstration.
Methods and Materials

1. Set of state adopted textbooks
2. Set of teachers manuals and guide books
3. Set of lesson plans and objectives
4. Visual aid materials and equipment
5. Charts and bulletin board materials

Evaluation

1. Observations and examinations

Behavioral Objective 5

1. The student will become familiar with authorities in his subject matter discipline. When given sample lessons in specific subject areas, student must be able to list at least five references and quote authorities for each area.

Performance Criteria

1. The student will become familiar with books and publications in his subject matter discipline.

2. The student will become familiar with recent supervisory and administrative practices, and be able to apply them to at least three classroom or teaching situations.

3. Become familiar with at least five references in major discipline.

Methods and Materials

1. The student will use textbooks and library resources on authorities in his major discipline. (5)


Evaluation

1. A mid-term and final examination.
Behavioral Objective 6

1. The student will prepare bulletin boards and other media displays in his subject matter discipline. When given sample materials, student must be able to select appropriate methods and decisions concerning their instructional use.

Performance Criteria

1. The student will gather materials appropriate for the subject matter he will teach.

2. The student will prepare bulletin boards for two separate classes.

Methods and Materials

1. The student will use books on bulletin boards, bulletin board supplies, and other necessary materials.

Evaluation

1. The major professor or advisor will evaluate the student throughout the course. At the end of the course if the student has not completed all of the performance criteria indicated, he will be recycled.

2. The student will write an appraisal of the course for the purpose of aiding in the evaluative process.

THE TEACHER AND THE SCHOOL COMMUNITY

Behavioral Objective 1

1. The student will study antecedent and related literature on the school community, and the role of the school in community development. At the end of the semester he should have a better understanding of the role of the school in community development. When given the necessary subject matter he will be able to organize a functional school program, which includes parents in the community.

Performance Criteria

1. The student will be required to read five books and at least five research articles on the role of the school in community development.
2. The student will attend five seminars dealing with the role of the school in community development.

3. The student will present a proposal for informing parents on the educational program of the school.

Methods and Materials

1. The student will need five books and five research articles dealing with the role of the school in community development. The student should subscribe to one or more major educational magazines that deal with current educational issues.

2. The student should also have access to one daily newspaper and one weekly newspaper.

3. The student will secure a notebook, a daily log book, writing paper, pencils, pen, ink, etc.

Evaluation

1. The experience will be graded "pass" or "fail." A mid-term and a final examination will be given.

Behavioral Objective 2

1. The student will participate in an educational clinic in a school-community related institution.

Performance Criteria

1. The student will contact his major professor in applying for placement in an educational clinic.

2. The student will contact leaders in community education clinics to participate in the program.

3. The student will participate in an educational seminar following his clinical experience.

Methods and Materials

1. Introduction to educational clinics by the instructor.

2. The most recent materials on educational clinical experiences as related to the community.


Evaluation

1. A research paper on the school community will be required.

2. Final examination.
PROFESSIONAL ETHICS

Behavioral Objective 1

1. The student will demonstrate in written and oral discussion his understanding of professional ethics and their application in the teaching field.

Performance Criteria

1. Student will read the "Code of Ethics" in the most recent N.E.A. Handbook.

2. The student will write a seven-page typewritten paper dealing with the application of at least three of the principles in the N.E.A. Code of Ethics to a selected problem or issue in teaching or education.

3. Student will participate (individual or group) in discussing a current problem in teaching in the light of professional ethics he sees most relevant and productive.

Behavioral Objective 2

1. In a number of real-life situations, planned by the instructor, students will demonstrate their knowledge and competency of professional ethics through the practice of ethical standards.

Performance Criteria

1. Student will write a four-page reaction or criticism critique on one selected case presented and dealt with by the N.E.A. Professional Ethics Commission.

2. Student will obtain from at least two school systems a copy of their professional ethics, standards, and practices.

3. The student will participate in a seminar on professional ethics.

Methods and Materials

1. N.E.A. Handbook (Professional Ethics Section, latest edition)

2. Individual codes of ethics from representative school systems.

3. Film from N.E.A., Washington, D.C. re: Professional Ethics and Standards

Evaluation

1. A mid-term and a final examination
2. A term paper on professional ethics

INTERNSHIP AND CLINICAL EXPERIENCES

Purpose: To provide laboratory experiences in teaching for prospective teachers.

Behavioral Objective 1

1. The student will acquaint himself with the Student Teaching Handbook at the beginning of the semester in which he will do his internship.

Performance Criteria

1. The student will be given a copy of The Student Teaching Handbook and when requested to do so, give highlights from each of the sections discussed.
2. The student will acquaint himself with all the policies and regulations contained in The Student Teaching Handbook.

Methods and Materials

1. The student will be supplied a copy of The Student Teaching Handbook.

Evaluation

1. Mid-term and final examination

Behavioral Objective 2

1. The student will confer with the supervisor of student teaching, and when requested, be able to discuss some common practices discussed in the Handbook.

Performance Criteria

1. The student will have scheduled individual conferences with the supervisor of student teaching prior to his student teaching experience.

Methods and Materials

1. The Student Teaching Handbook.
Evaluation
1. Mid-term and final examination.

Behavioral Objective 3
1. The student will attend all seminars connected with his student-teaching program.

Performance Criteria
1. The student will bring to the seminar his copy of The Student Teaching Handbook, the handbook of the public school system, a register, sample lesson plans, and other school publications.

Methods and Materials
1. Same as listed above.

Evaluation
1. Oral and written examination, including a final.

Behavioral Objective 4
1. The student will acquaint himself with the policies of a local administrative unit (unit in which he is to do his internship), and when requested to do so, present some of the negative and positive features of the system.

Performance Criteria
1. The supervisor of student teaching will secure copies of the policies of the local administrative unit to be given to the student teacher.
2. The student will carefully study the policies and regulations pertaining to the school in which he is to do his internship.

Methods and Materials
1. Interviews between professor and internees.
2. Student teaching forms, handbooks and materials gathered from local school units.

Evaluation
1. Oral and written examinations.
Behavioral Objective 5

1. The student will properly report to the assigned school for his internship.

Performance Criteria

1. The student will report to the school in which he has been assigned on the designated date and at the designated time.

2. The student will contact the appropriate personnel upon reporting to the school.

3. The student will be responsible for making arrangements for room and board and/or transportation to and from school.

Methods and Materials

1. Forms furnished by college and local school unit.

Behavioral Objective 6

1. The student will have an orientation conference with the school administrator, cooperating teacher, and supervisor, after which he will list in chronological order his duties for the first week of his student teaching experience.

Performance Criteria

1. The student will report to the cooperating teacher for his observation period and subsequent teaching assignment.

Methods and Materials

1. The student will receive from the cooperating teacher a set of North Carolina State adopted textbooks in the student's particular subject discipline, manuals and guides.

2. Standard forms to be filled out by the cooperating teacher, and materials furnished by college and local schools. Latest books and pamphlets.

Evaluation

1. Conferences and oral examination.

Behavioral Objective 7

1. For eight (8) weeks, the student will perform under the direction of his cooperating teacher. The student will report to the supervisor of student teaching on the campus of the University at three scheduled times during the student teaching period. At the end of the student teaching period, the student will be expected to perform as a first year teacher.
Performance Criteria

1. The student will report for seminars at designated intervals for the purpose of exchanging ideas and discussing problems encountered in student teaching.

Methods and Materials

1. A set of State adopted textbooks and teacher's manuals.
2. Writing paper, notebook, pen and pencils.
3. Register and roll book.

Evaluation

1. An evaluation sheet from the cooperating teacher, plus the evaluation from observations of the supervisor will be used.
2. The student will attend an evaluation post-seminar as a part of the evaluation process.
3. If the student fails on more than thirty percent of the items on the evaluation sheet, he will be recycled through the student teaching program.
4. The student will be required to give a report on State certification. The report will be given in the seminar mentioned above.

AUDIO-VISUAL AIDS

Behavioral Objective 1

1. Students must be able to operate designated equipment. When given sample subject matter, students must be able to select proper media for effective presentation. Students must learn the "why" of media in teaching.

Performance Criteria

Each student will be assigned a card listing the projects of the course. Projects listed on student cards cover this equipment:

1. Filmstrip Projector: Student must select filmstrip, show and comment.
2. Overhead Projector: Produce 5 transparencies on approved subject. Demonstrate.

3 Sixteen MM. Movie Projector: Introduce, show film and discuss.

4. Eight MM. Camera and Projector: Produce 50 feet on approved subject and show.

5. Tape Recorder: Reel, Cartridge and Cassette. Produce 5 minutes on each.

6. Copy machine: Ditto, Thermofax and Copier. Make 10, 1 and 1 and use in class.

7. Autotutors: Use, analyze and discuss.

8. Opaque Projector: Select a sample, demonstrate in a class situation.

9. Video Tape Recorder: Prepare, produce and show 5 minutes.

Methods and Materials

The latest application and operation of audio-visual equipment in education textbook will be used.

Twenty-minute lectures on the following:

1. Introduction, Pre-test, Systems Analysis.
2. Selection of Media
3. Non Projected Materials
4. Projections
5. Individual Instruction, Programmed Instruction
6. Films
7. Cost of Teaching, Cost of Learning
8. Learning Resources Center
9. "Micro" Everything
10. Exam Preparation

Evaluation

1. Each project will be graded as "pass" or "fail." Three trials are allowed per project.

2. A mid-term and final exam will be administered.
MODEL SUMMARIES
A Proposed Comprehensive Program for the Training of Elementary Teachers at Shaw University grew out of a two-year study of models from ten other institutions engaged in developing plans for performance-based education. Part I was concerned with the summary of the models, a hard look at our present elementary teacher education program, and an in-depth study of three models most applicable and relevant to our teacher education program. We were concerned primarily with the many changes taking place in elementary education throughout the nation, especially in the pre-service and in-service areas. Our primary concern was in developing an elementary teacher education program geared to performance-based teaching and competencies, and micro-teaching and multi-media aspects of teacher education. We planned to develop our program along the lines of many of the innovative concepts of the nine models.

Our study of these innovations led to the second part of our project—"An Innovative Project to Motivate Seventh and Eighth Graders in Selecting their Learning Activities." Here we were concerned with two pilot schools in which a complete elementary setting existed. This setting was organized around teachers, pupils, and administrative personnel from the office of Wake County Superintendent of Schools. This part of the model involved working with 100 students and 20 teachers in organizing a program whereby seventh and eighth graders could select their own learning activities. Experienced consultants in the various disciplines provided demonstrations for the students and teachers who were participating in the project. These demonstrations were carried out in the public school classrooms and served as a means to motivate the students in selecting their own learning activities. To further enhance the significance of the project, a series of tests were given to stimulate the seventh and eighth graders in selecting their own learning activities. The S.R.A. Achievement Series Test was administered at the beginning of the project and again near the end of the project to measure the interest and scope of students' learning activities. The Gray's Standardized Oral Reading Paragraph Test was also administered at the beginning and at the end of the project. A compilation of the results of these tests will be included as a part of the final project.
SUMMARY

A PROPOSED COMPREHENSIVE PROGRAM FOR THE TRAINING OF ELEMENTARY SCHOOL TEACHERS AT SHAW UNIVERSITY - PART I

The teacher education faculty of Shaw University in its study of the nine models conducted an in depth review of three models, namely, Florida State University, University of Massachusetts and University of Georgia.

Chapter one of this model is a detailed summary of the contents of these models as related to the teacher education program of Shaw University. The following are summary briefs which represent highlights of the study.

A. Sound Philosophical Basis for Elementary Teacher Education at a Developing Institution

Teacher education programs must meet the needs of teachers who will be working in a new environment. The philosophy of flexibility and planning for change is one of the most important criteria which should serve as a basis for redeveloping elementary teacher education programs.

The teacher education department must accept a stronger commitment to provide in-service teacher education.

The concept of careful and early screening of applicants for teacher education is emerging as one means of securing staff that is more competent and more strongly committed to the teaching profession.

B. Developing and Utilizing Performance Criteria in Teacher Education

Performance criteria or behavioral objectives essentially defined operationally what behavior, skills, and knowledge are expected of teacher trainees, the condition under which the objective should be sought, and the method by which the behavior can be evaluated. The utilization of performance criteria rather than the prescribed hours of a specified course allow for more flexibility in developing future teachers.

Performance criteria for the cognitive domain primarily require that courses be analyzed for specific
and meritable knowledges which are desired. Learning performance should be the major criterion in judging a teacher trainee's success in a course.

One of the basic goals of the teacher education program is the development of the technical skills of teaching, most of which consists of specific behavior acts. If skills and behaviors which teachers perform often in the classroom can be identified, different training procedures and techniques can be developed in order to produce proficiency in their use. The use of micro-teaching in the training of prospective teachers is suggested.

C. Human Relations Skills

Human relations is defined as behaviors exhibited in relation to self and other individuals and in relation to groups.

Teacher education programs should be committed to types of human behavior considered desirable for elementary school teachers such as: warmth, critical thinking, openness, and consciousness of cultural differences.

A teacher education program should develop teachers that will meet the human criteria of warmth of human understanding, rigorous thinking, control of their own behavior, and a constant pattern of growth.

D. Relationship Between Teacher Education and Teaching Competencies

The goal of competency in the subject matter, presentation, and professional decision making areas serves as the guiding basis of the new teacher education program. These competencies are interdependent and cumulative, as are the skills and knowledge necessary to produce them.

E. Projected Changes Influencing Teacher Education for Elementary Teachers.

Changes are predicted by studying trends in society. Some predictions for education should be considered in the development of a teacher education program.
CONCLUSION

A. A Sound Philosophical Basis for Elementary Teacher Education at a Developing Institution

1. Teacher education programs, to be effective, must meet the needs of students in a changing society.

2. Commitment is essential for the development and promotion of a good teacher education program.

3. Screening is absolutely necessary for the selection of staff for the teacher education department and the selection of students as participants in the program if an effective program is to be realized.

B. Developing and Utilizing Performance Criteria in Teacher Education

One of the prime concerns in setting up an effective teacher education program is the development of course behavioral objectives.

Another prime concern in setting up an effective teacher education program is the development of course performance criteria. It seems that the components of performance criteria as measurements to determine graduation are superior to the course hour credit system.

A system that will involve the development of the technical skills of teaching seems to be essential for good teacher performance.

C. Human Relations Skills

Good human relations skills are vital to teacher competency. Experiences that will involve rigorous thinking and self-control are vital to a good teacher education program.

D. Relationship Between Teacher Education and Teaching Competencies

It seems that competency is a vital part of performance criteria. To be effective the characteristics of competency must be developmental, cumulative and interdisciplinary.

E. Projected Changes Influencing Teacher Education for Elementary Teachers

A good teacher education program is effected by the study of the trends of society.
RECOMMENDATION AND IMPLEMENTATION

The following recommendations and implementations are presented for the teacher education department of Shaw University:

A. Sound Philosophical Basis for Elementary Teacher Education at a Developing Institution

Recommendation

1. That the teacher education department of Shaw University make a thorough study of expectations and demands of various segments of our society for the purposes of enrichment and expansion.

Implementation

The teacher education department will publish, indicating the following:

a. The demands of the State Department of Education.
b. The demands of society.
c. The demands of Shaw University Education Department.
d. A vehicle for student input.
e. A consequential arrangement of course content from the freshman year through the senior year.

Recommendation

2. That the teacher education department commit itself to the development and promotion of an adequate program of education that will meet the needs of students.

3. That the education department seek to obtain an adequate staff through the process of screening.

Implementation

a. The teaching staff will together organize a working philosophy that is in tune with the needs of students.
b. That a seminar for students be set up to acquaint all teacher education students with the philosophy of man and other bits of information in this report.

B. Developing and Utilizing Performance Criteria in Teacher Education

Recommendation

That behavioral objectives and performance criteria be set up for each course in the teacher education department. That the performance criteria be so structured that students
will understand how to maneuver. Further, that students will not be permitted to advance until they have accomplished each performance criterion. That upon the completion of the performance criteria he will be given credit for the course. Further, that the measurement of credit be awarded according to the number of performance criteria to be accomplished. Also that a review board, composed of the teacher education staff and selected students who have completed at least one half of his course requirements, will interview each student entering the teacher education department as a prerequisite towards his graduation. The Review Board will determine his credits based on the accomplishment of each performance criterion.

**Implementation**

A booklet or pamphlet be published with the sequential arrangement of courses be stipulated according to requirements of the Teacher Education Department.

That a balance sheet composed of a sequential arrangement of subjects required and elected be organized by the Teacher Education Department.

At the registration, beginning with the freshman term, the balance sheet will be used by the student and his advisor through his graduation.

**C. Human Relations Skills**

**Recommendation**

That behavioral objectives and performance criteria sequence be organized for courses that involve human relations skills, that procedures suggested in (B) be utilized here.

**D. Relationship Between Teacher Education and Teaching Competency**

**Recommendation**

That the teacher education department in its study and implementation of behavioral objectives and performance criteria be concerned about phases of each discipline that will complement the content structure of each course.

**Implementation**

The teacher education department will set up conferences with instructors in General Studies to determine phases in each discipline that will strengthen the behavior objective sequential arrangement in professional courses.
E. Projected Changes Influencing Teacher Education for Elementary Teachers

Recommendation

That the teacher education department study means by which students can get thoroughly acquainted with political, social, and economic trends in our society. Further, that the department study means by which students can get thoroughly acquainted with an evaluation of educational philosophy as well as contemporary thought in education.

Implementation

The teacher education department will promote seminars in educational, social, economic, and political trends. Further, that the seminars agenda includes educational philosophy as it applies to educational planning.

That the teacher education department set up behavioral objectives and performance criteria for seminars suggested in this implementation.

That the Review Board suggested above take these behavioral objectives and performance criteria into account as they interview students for qualification of credits.
SUMMARY

INNOVATIVE PROJECT TO MOTIVATE SEVENTH AND EIGHTH GRADE STUDENTS IN SELECTING THEIR OWN LEARNING ACTIVITIES

This innovative project was designed as an experimental program in pupil-teacher relationships in planning and sharing in their own educational pursuits.

The designing of this experiment was based on the assumption that pupils in the seventh and eighth grades can be an asset in educational planning and programming in which they are involved.

Preplanning sessions involved the Teacher Education personnel of Shaw University and personnel in the Central Office of the Wake County School Administrative Unit, and principals and counselors from the two pilot schools.

The preplanning program included the selection of students and teachers that would be involved in the project. Twenty teachers and one hundred students were selected. The number was equally divided between two schools, namely, the Millbrook Middle School and the Garner Junior High School, Wake County, North Carolina.

A survey was conducted among the teachers for the purpose of understanding the program and procedures of the working force. The survey included the educational philosophy, procedures and practices utilized by teachers who were selected for the project.

The questionnaire also revealed a variety of plans and objectives in the two schools.

The survey revealed a strong program of education in both schools. Evidences revealed an excellent in-service program conducted by the Wake County Administrative Unit and the administrative and supervisory personnel of both schools.

It should be mentioned that the survey indicated that teachers acquired strong philosophies of education which guided them in their planning and educational development. The study revealed daily lesson planning on the part of the teachers, deep concern for efficiency and an awareness of relevancy in education.

The testing services revealed significant growth in learning during the interim. In fact, the tests revealed phenomenal growth in reading and subject matter content.
The inventory instrument administered to students revealed the subject matter interests of students. It reflected teaching methods and techniques that were both favorable and unfavorable to students, with the "favorable" way out front.

The demonstrations presented by the teacher education department of Shaw University, personnel from the State Department of Public Instruction, and personnel from the Wake County Administrative Unit provided unique and meaningful teaching-learning programs that served as guidelines for a continued development of program and planning.

The Charrette provided for the students in both schools was a "high spot" in project development. It provided opportunity for both written and verbal expression concerning the likes and dislikes in education. Students were given an opportunity to perform role playing, as teachers which gave them the chance to experience teaching and learning from the other side of the desk.

The Charrette was evaluated by the students. The evaluation revealed that the goals of the Charrette were realized. Students expressed their enjoyment and the request for other Charrette experiences. They presented valuable issues in education for the agenda.

CONCLUSION

It seems evident that students in the seventh and eighth grades at the two schools in this project are fully capable of assisting in planning their own learning activities. Due to motivational forces, not only were they capable, but evidences show that they were willing and anxious to participate in planning their own program activities.

As to the qualifications of the teachers in the project, evidence pointed up the fact that they are well prepared for their tasks. Evidence also showed that these teachers keep up very well with the current trends in education, and it also showed a good working relationship among teachers, counselors, and supervisors.

According to the significant growth pattern as registered on both the S.R.A. Achievement and the Gray's Paragraph Reading Test series, it seems evident that a rich and innovative program in education must have been administered during the interim.
It seems that students are capable of expressing their likes and dislikes in educational activities.

It seems that the use of specialists in education are necessary to provide unique and meaningful teaching-learning programs to serve as guidelines for a continued development of program and planning.

That charrette type experiences are valuable to serve as vehicles of expression for students.

That student evaluation is necessary and important in teaching-learning situations.

RECOMMENDATIONS

After realizing conclusive statements drawn from a summary of experiences that involve the innovative project in which seventh and eighth graders shared in planning their own educational activities, the educational staff of Shaw University would like to make the following recommendations to the administration and staff of the two schools in this report:

a. That in planning for the overall educational program which includes school policies, etc., that students be permitted to share their ideas and opinions.

b. In curriculum planning and construction that students be permitted to share their ideas and opinions.

c. In lesson planning that students be permitted to share their ideas and opinions.

d. Due to the comprehensive curricula of the S.R.A. Achievement test series and because of its remedial factors and teaching suggestions, it is highly recommended that the administration and staff of the schools consider its use.

e. According to the phenomenal results of the Gray's Paragraph Reading test, the teacher education staff wishes to recommend its use as a quick screening device for teaching and learning.

f. Due to the fact that demonstrations of various types provide high types of learning experiences which give impetus to routine teaching and learning, the teacher education staff recommends more demonstrations in which students and teachers can participate together.
g. Since it seems that growth in education is more assured when criticism is permitted, the staff of the teacher education department recommends more charrette type of experiences in which students will be permitted to role play. It is recommended further that follow-up exercises be permitted for the purpose of strengthening the educational program for the two schools.

IMPLEMENTATION

Here are some suggestions for implementation: the teacher education staff of Shaw University does not assume that the following suggestions are already in process.

a. 1. Faculty-student planning committees
   2. End-of-the-year faculty-student evaluation committee
   3. Faculty-student committee presentation to P.T.A.

b. Since the school curriculum includes all the learning activities under direction of the school, there are certain learning activities in which students are adept at planning. Extra class activities such as:

   1. Intra-mural activities
   2. Clubs and organizations
   3. Assemblies

c. The unit approach to teaching provides excellent opportunities for pupil-teacher planning, especially for such areas as: social studies, health, and science. The following steps may be considered:

   Step 1 - The Approach or Introduction

   This step may involve the showing of a film, a series of slides, a teacher or student made movie role, a story, a field experience, etc.

   Step 2 - The Planning

   In this step students and teachers raise significant questions and make significant statements which comprise a plan for group action. Groups are organized around large areas of questions and statements raised.
Step 3 - Research and Work

In this step individual students and groups do research for the questions and statements raised in step two. Projects and activities are suggested by students and teachers.

Step 4 - Presentation and Report

Students in this step present individual and group reports. Reports and projects are evaluated by students and teachers. Plans for further study are also made.

Step 5 - Culmination

The unit may be culminated in the form of exhibits, assembly programs or in any other way suggested by students.

Other suggestions for the unit approach to teaching:

1. Unit titles should precede the unit.
2. The use of textbooks, supplementary books, library books, current material, news media, community, state and national resources should be utilized.
3. Human resources such as: librarians, counselors, supervisors, community leaders, community agencies and state agencies should be utilized.
4. The social studies provides the best area for the unit approach to teaching due to its high correlative values.

See a review of remedial and follow-up programs of the S.R.A. Test Series elsewhere in this report.

The Gray's Paragraph Reading Test can best be used in seventh and eighth grade reading programs in the elementary school and in English classes in the high school. The Gray's Paragraph Reading Test may be used to screen those students who need lower level reading material. Progress in reading can be better assured by selecting textbooks, supplementary books, and library books based on the reading level of students.

Refer to demonstrations suggestions found elsewhere in this report.

Refer to charrette experience found elsewhere in this report.
SUMMARY

HIERARCHY FOR DEVELOPING BEHAVIORAL OBJECTIVES

In developing a hierarchy of content suitable for achieving behavioral goals, it might be well to consider some advantages of behavioral objectives as taken from various studies. They are as follows:

1. Improves the instructional process in any classroom organization.

2. Leads to greater individualization of instruction.

3. Helps program individual students through certain experiences in light of their objectives and needs.

4. Leads to the development of a learner-based curriculum, learner-based teaching methodologies, skillful diagnosis and prescription, and open-end curricula—all contribute to continuous progressive education.

5. In classes where pupils are grouped on the basis of maturation, interests or level of sophistication, the teacher can use behavioral objectives to guide these groups as well as through progressive sequences of facts, concepts, and skill acquisitions.

6. An important aspect of both heterogeneous and specially grouped classes is pupil-teacher planning, in which pupil and teacher together formulate behavioral objectives.

7. Ideally, educational objectives result from and should represent the synthesis of those ideas most conducive to the best possible development of the individual and to the improvement of society.

8. Behavioral objectives should be in terms of what the learner is to be able to do as a result of instruction, starting with the learner and his needs to modify his behavior.

Why We Care About Objectives

An objective is an intent communicated by a statement describing a proposed change in a learner—a statement of what the learner is to be like when he has successfully completed a learning experience. It is a description of a pattern of behavior.
The statement of objectives of a training program must denote measurable attributes observable in the graduate of the program or, otherwise it is impossible to determine whether or not the program is meeting the objectives.

An additional advantage of clearly defined objectives is that the student is provided the means to evaluate his own programs at any place along the route of instruction and is able to organize his efforts into relevant activities. With clear objectives in view, the student knows which activities on his part are relevant to his success, and it is no longer necessary for him to "psych out" the instructor.

SUMMARY

1. An instructional objective describes an intended outcome rather than a description or summary of content.

2. One characteristic of a usefully stated objective is that it is stated in behavioral, or performance, terms that describe what the learner will be DOING when demonstrating his achievement of the objective.

3. The statement of objectives for an entire program of instruction will consist of several specific statements.

4. The objective that is most usefully stated is one that best communicates the instructional intent of the person selecting the objective.

In a historical approach to educational objectives, mention was made of the importance of acquiring an evolutionary philosophical concept in education as a background for developing meaningful behavioral objectives. Educational philosophies were selected from the pages of past history of educational objectives which stressed individualized approach to education.

Educational objectives were developed for the major areas of the elementary school curriculum. These objectives were presented as samples to be studied by students in the teacher education department.
CONCLUSION

It seems that a thorough study of how to organize behavioral objectives should be considered in planning and developing a teacher education department. It is also important to study educational philosophy as it is applied to educational development in the United States.

It seems feasible at a given time in teacher education development that prospective teachers should be provided with experience of setting up educational objectives for elementary education areas they will be teaching later.

RECOMMENDATION

The suggestion concerning setting up educational objectives is stated elsewhere in this report.

The course in educational philosophy should be changed to a seminar in educational philosophy.

It is recommended that prospective teachers should be given the opportunity to learn how to set up educational objectives for the area in which they will be teaching.
SUMMARY

INNOVATIVE MODULE FOR TEACHER EDUCATION

It seems that according to the program as set up by the teacher education staff of Shaw University in its consideration for innovative modules, a performance-based program is feasible.

Behavioral objectives and performance criteria were set up for audio-visual aids, pre-service education, teaching methods and techniques, the teacher in the school community, professional ethics and internship and clinical experiences.

The module included behavioral objectives, performance criteria, materials and media, evaluation, and recommendations for each area stated above.

CONCLUSION

It seems that a course organized by stating behavioral objectives and performance criteria is more definite and directive. It provides opportunities for the anticipation of needed materials and supplies. It also sets the stage for more meaningful evaluation.

RECOMMENDATION

That all the professional courses in the teacher education department provide performance-based criteria.
A LOOK AT THE SCHOOL PROGRAM

HEALTH AND PHYSICAL EDUCATION TEACHER

HEALTH

1. Do you have a health text for your class? Yes ___ No ___

2. Check the use you make of the textbook during the health period. All of the time ____ Most of the time ____ Very little ______ No use ____.

3. Is health correlated with other subject matter areas? Yes ____ No ____ If yes, please list the subject matter areas ________ ________ ________ ________ ________.

4. Has your class done any health projects this year? Yes ___ No ___. If Yes, please list them ____________________________ ____________________________.

5. Does your class make use of health agencies? Yes ___ No ___. If Yes, please indicate ____________________________ ____________________________.

6. Has your class participated in any projects related to health hazards, social diseases, communicable diseases, or narcotic education? Yes ___ No ___. If Yes, please indicate ____________________________ ____________________________.

7. Do you have health supplementary materials such as books, pamphlets, etc., available in your classroom? Yes ___ No ____ Library? Yes ___ No ____ If yes, how do you make use of them? ____________________________

8. How do your classes make use of the school nurse? (omit referrals)

The school doctor ____________________________
The local health agencies ____________________________

PHYSICAL EDUCATION

1. Do you have a Physical Education classroom? Yes ___ No ___. If no, how and where do you conduct the classroom phase of your physical education program? If no, do you consider this an asset or a liability? Comment.

2. Do you share your gym. class period with another teacher? Yes ___ No ___. If no, is this an asset or a liability?
APPENDIX A

3. Please check the following physical education experiences your class participates in at any time during a given period, like a month, two weeks, or whatever your planned periods are, if any.

a. Calisthenics
b. Rhythms
c. Creative Dancing
d. Games
e. Games of high participation (example: baseball - limited number)
   Games of low participation (example: dodge ball, unlimited participation)
f. If games of high participation, are they organized so that all can participate? Yes ___ No ___. If yes, how ______

4. Is there any time during the class when all students participate in a running or jumping exercise? Yes ___ No ____.

5. Do you utilize the out-of-doors on most good weather days? Yes ___ No ____

6. Is your P.E. period composed of mere basketball playing? Yes ___ No ___. If no, what other type of P.E. activities do you plan for your class? ______

7. Describe your planning: teacher planning ___ pupil-teacher planning ___ pupil planning ___ (check one).

8. Are you certified in P.E.? Yes ___ No ___. If so, do you feel competent with your assignment? Yes ___ No ___. Any suggestions ______

ART

1. Do you correlate Art with other subject areas? Yes ___ No ___. If Yes, which? ______

2. If no, briefly describe your art program ______

3. Do you subscribe to the philosophy that every teacher can be an art teacher in the elementary department? Yes ___ No ___. If yes, tell how briefly ______

4. If no, what type of art program do you think should be provided? ______

5. Do you think that the Art teacher or art supervisor should teach all the art? Yes ___ No ___.

6. If you are a teacher here, have you participated in an art workshop? Yes ___ No ___. This year ___ last year ___ three years ago ___ Before three years ago ___.
APPENDIX A

7. If your answer to number 3 is yes, do you think art workshops are necessary? yes ___ no ___. If yes, tell why? ________________

LANGUAGE ARTS

1. Reading Methods: Do you utilize the whole class methods or the group method in teaching basic reading? Whole class method ____
   Group method ____ (check one) If group method, how do you determine the group? ___________________________.
   What titles do you have for each group? ___________________________.

2. If you utilize the group method tell briefly what you do with other groups while teaching one. ___________________________.

3. If you are utilizing this method, do you need further help? Yes ___ No ___. If yes, state specific problem areas ___________________________.

4. Do you have enough basic textbooks? Yes ___ No ___

5. How many basic series do you use? ____ Please list them ___________________________.

6. Do you utilize the end of the book tests? Yes ___ No ___. If yes, state briefly how you use them. ___________________________.

7. Do you understand the basic skills of reading as utilized by the series you are using? Yes ____ No ____

8. Do you disagree with the series as to the use of basic skills? Yes ___ No ___. If yes, please note the skills you prefer over and above or instead of the author's. ___________________________.

9. Do you have a supplementary reading program? Yes ___ No ___. If yes, describe it briefly. ___________________________.

10. Do you have enough supplementary books for your program? Yes ___ No ___

11. Do you make use of the library in your reading program? Yes ___ No ___
    If yes, state briefly how. ___________________________.

12. Do you make use of any test data in your reading program? Yes ___ No ___
    If yes, describe program briefly. ___________________________.

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13. Do you make use of various experiences in your reading program? Yes  No. If yes, tell how briefly. ______________________________.

14. Have you made a study of any reading plan other than the basic reading program of the company series you are now using? Yes  No. If yes, please describe it briefly ________________________________.

15. Do you have access to books on the following subjects? Reading material for boys? Yes  No. Reading material for girls? Yes  No. Related to understanding black people? Yes  No. Other ethnic groups? Yes  No. If yes, please indicate the ethnic group ________________________________.

16. Do you have non-readers in your class group? Yes  No. If yes, state briefly how you deal with them in reading experiences. ________________________________

MUSIC

1. Do you correlate music with other subject areas? Yes  No. If yes, which? ________________________________

2. If no, briefly describe your music program _____________________________________________

3. Do you subscribe to the philosophy that every teacher can be a music teacher in the elementary department? Yes  No. If yes, tell how briefly ________________________________.

4. If no, what type of music program do you think should be provided? ________________________________

5. Do you think that the music teacher or music supervisor should teach all the music? Yes  No ________________________________

6. If you are a teacher here, have you participated in the music workshop? Yes  No  This year  Last year  Three years ago  Before three years ago ____________________________________________

7. If your answer to number 3 is yes, do you think music workshops are necessary? Yes  No. If yes, tell why? ________________________________
SMALL GROUP ACTION

Problems in Education as Seen by Junior High School Students

Problem 1--Joyless School Moments

Some students complain that there are many dull moments in school. Schools are not joyful according to the opinion of some students. They are happy when the time comes to leave school.

If you are conscious of this situation or if you have heard students express these opinions, what do you think are some of the causes? List these causes. List some suggestions for improvement.

Problem 2--Social Studies Learning

In our schools today, Social Studies are taught in two different ways: 1. Memorizing dates and accumulating facts. 2. While learning facts, activities are provided that will help students to learn how to live with others and how to live in the society in which they find themselves.

Which one do you prefer for students? Why?

Problem 3--Classroom Management

Imagine that you are a teacher. Describe the classroom you would have. What would be your attitude toward fast and slow learners?

Problem 4--Demonstrations

Several outside teachers have been in your school this year to demonstrate some teaching techniques in an effort to try out some new ways of teaching and learning. They are anxious to know what you think of some of these demonstrations.

Make a group report on reactions to these demonstrations.
STANDARDIZED ORAL READING PARAGRAPHS

<table>
<thead>
<tr>
<th>Name</th>
<th>Age Today</th>
<th>Years</th>
<th>Months</th>
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<tr>
<th>Race</th>
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<th>Grade</th>
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<tr>
<th>City</th>
<th>State</th>
<th>Date</th>
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<table>
<thead>
<tr>
<th>School</th>
<th>Teacher</th>
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</table>

Directions to Teacher

Each child should be tested apart from the others in a room by himself. Give him an unused folder. Take another folder and fill in the above blanks before beginning the reading. As the child reads, record his efforts, using the marks presented on the class record sheet, and following the directions printed there as accurately as possible.
A boy had a dog.
The dog ran into the woods.
The boy ran after the dog.
He wanted the dog to go home.
But the dog would not go home.
The little boy said,
"I cannot go home without my dog."
Then the boy began to cry.

Once there was a little pig.
He lived with his mother in a pen.
One day he saw his four feet.
"Mother," he said, "what can I do with my feet?"
His mother said, "You can run with them."
So the little pig ran round and round the pen.

Once there was a cat and a mouse. They lived in the same house. The cat bit off the mouse's tail.
"Pray puss," said the mouse, "give me my long tail again."

Once there lived a king and a queen in a large palace. But the king and queen were not happy. There were no little children in the house or garden. One day they found a poor little boy and girl at their door. They took them into the beautiful palace and made them their own. The king and queen were then happy.

One of the most interesting birds which ever lived in my bird-room was a blue-jay named Jackie. He was full of business from morning till night, scarcely ever still. He had been stolen from a nest long before he could fly, and he had been reared in a house long before he had been given to me as a pet.
The part of farming enjoyed most by a boy is the making of maple sugar. It is better than blackberrying and almost as good as fishing. One reason why a boy likes this work is that someone else does most of it. It is a sort of work in which he can appear to be very industrious and yet do but little.

It was one of those wonderful evenings such as are found only in this magnificent region. The sun had sunk behind the mountains, but it was still light. The pretty twilight glow embraced a third of the sky, and against its brilliancy stood the dull white masses of the mountains in evident contrast.

The crown and glory of a useful life is character. It is the noblest possession of man. It forms a rank in itself, an estate in the general good will, dignifying every station and exalting every position in society. It exercises a greater power than wealth, and is a valuable means of securing honor.

He was approximately six feet tall and his body was well proportioned. His complexion inclined to be florid; his eyes were blue and remarkably far apart. A profusion of hair covered the forehead. He was scrupulously neat in his appearance; and, although he habitually left his tent, he was well dressed.

Responding to the impulse of habit Josephus spoke as of old. The others listened attentively but in grim and contemptuous silence. He spoke at length, continuously, persistently, and ingratiatingly. Finally exhausted through loss of strength, he hesitated. As always happens in such exigencies he was lost.
The attraction of the American prairies as well as of the alluvial deposits of Egypt have been overthrown by the azure skies of Italy and the antiquities of Roman architecture. My delight in the antique and my fondness for architectural and archaeological studies verges onto a fanaticism.

The hypotheses concerning physical phenomena formulated by the early philosophers proved to be inconsistent and in general not universally applicable. Before relatively accurate principles could be established, physicists, mathematicians, and statisticians had to combine forces and work arduously.
INTEREST INVENTORY

Directions: This inventory has seven subject areas. Some are to be answered by a simple "yes" or "no." Others are to be answered by an opinion response ("I like it, I like it very much, I do not like it or It makes no difference.") Please read each question and place a check mark (✓) in the appropriate column. It is not necessary for you to sign your name.

SEE TABLES I THROUGH VI a, PAGES 44 THROUGH 53.
We would like to have your opinion about some of your school experiences. Please read the following statements and check the one under each statement that seems to describe you. Read the statements and check only one under each statement. Put your best thinking into it. Wait until everyone has finished before turning your paper in. Do not sign your name.

1. Every time I try to improve my school work something or someone stops me.

   ( ) This is not true for me
   ( ) This is often true for me
   ( ) Sometimes this happens, but not very often
   ( ) I'm not sure that I understand this question

2. In thinking about what will happen when I grow up,

   ( ) I'm sure things will turn out well for me
   ( ) I wonder if I'll be able to succeed
   ( ) I'm almost sure I don't have a chance to succeed when I grow up
   ( ) I seldom think about what it will be like when I grow up.

3. The thing which I do in school that I am most proud of is:

   ( ) Being neat and prompt in my work
   ( ) Helping the teacher in the classroom
   ( ) Getting good grades on my report card
   ( ) Being well liked by all the students
   ( ) Nothing that I do in school makes me proud

4. During the last two or three years, it seems to me that:

   ( ) School is much more directly related to life outside of school
   ( ) School has little relationship to life outside of school
   ( ) Much of what I hear in school is contradictory to what I see and hear outside of school.
5. During the past school year, did you ever stay away from school just because you didn't want to come?

( ) No
( ) Yes, for 1 or 2 days
( ) Yes, for 3 to 6 days
( ) Yes, for 7 to 15 days
( ) Yes, for 16 days or more

6. Does your teacher understand children?

( ) Almost all the time
( ) Sometimes
( ) Almost none of the time
( ) Never

7. When things go wrong at school, I usually:

( ) Think that the teacher is treating me unfairly
( ) Try to see why things went wrong and work harder to correct them
( ) Wish that I were much younger and didn't have to go to school
( ) Wish that I were much older and didn't have to go to school
( ) Wish that I could get away some place and cry

8. Which one of the following best describes the way you feel when the teacher doesn't like what you have done:

( ) I try to find out what the teacher wants so I can do that
( ) I stop trying to please the teacher
( ) I know I could do better except that I often don't feel well
( ) I don't care what the teacher thinks

9. How often do you and your parents talk about your school work?

( ) Just about every day
( ) Once or twice a week
( ) Once or twice a month
( ) Never, or hardly ever

10. During the past year or two, has your mother or father visited school during the time that school was in session?

( ) Yes, my mother or father have visited at least once in the past two years
( ) My mother or father have visited school but not during class time
( ) I don't remember that my mother or father have visited school at any time during the past two years.
11. Which of the following statements do you think is most nearly true?

( ) Adults always do what they say they will do
( ) Adults usually do what they say they will do
( ) Adults sometimes do not do what they say they will do
( ) Adults very often do not do what they say they will do
QUESTIONNAIRE

1. What relationship have you observed between your students and the various academic subjects since the project started?

2. Did you see any of the demonstrations performed in your school? If so, did the demonstrations help you in your daily planning? If they did, how?

3. Have you given any special demonstrations? If so, in what area were these demonstrations given? What follow-up procedures were used? What were the results?

4. Do you use Behavioral Objectives in your planning? If you do, in what subject areas? If you do not, what is your reason for not using them? If you do not use Behavioral Objectives in your planning, which of the following do you use?

   - General Objectives
   - Specific Objectives
   - Aims
   - Goals
   - Neither
   - Others (list)

5. What values have you received from this project?

6. List any suggestions you may have for improving the project.
7. Do you approve of the teacher-pupil planning concept?  
   Do you use the teacher-pupil planning concept?  
   If so, in what subject areas?

8. Do you think that students should be permitted to aid in the  
   selection of their own learning experiences?

9. Do you make attempts to individualize your classroom instruc-
   tion?  If so, in what subject areas?

10. Which of the following method(s) do you use in your planning?

    Daily
    Weekly
    Monthly
    Semester
    Annually
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