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RURAL SCHOOL SUPERVISION

ABSTRACTS OF ADDRESSES DELIVERED AT THE SECOND CONFERENCE OF SUPERVISORS OF THE SOUTHEASTERN STATES HELD AT RALEIGH, NORTH CAROLINA DECEMBER 6 AND 7, 1926

PREPARED IN THE DIVISION OF RURAL EDUCATION

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LETTER OF TRANSMITTAL

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., July 10, 1927.

SIR: The professional supervision of schools in rural communities is a matter of growing interest and importance in the nation-wide efforts now being made for their improvement. Administrative supervision of rural schools, general in nature, is old; instructional supervision, special in nature, having as its direct aim the improvement of teaching techniques and the professional growth of teachers in service is new. Guidance in perfecting supervisory practice is among the most essential of the various needs of officials responsible for the efficiency of rural schools. This summary of the proceedings of a conference which I called at Raleigh, N. C., in December, 1926, at the request of a committee of State and county supervisors of the Southeastern States contains material which in my judgment is representative of the most progressive ideals and practices of supervisors in this field of education. I believe it will be widely serviceable and of interest and inspiration to all workers in the field of rural education. I recommend its publication as a bulletin of the Bureau of Education.

JNO. J. TIGERT,
Commissioner.

The SECRETARY OF THE INTERIOR.

Introductory Statement

This bulletin contains abstracts of addresses delivered at a two-day conference of State and county rural-school supervisors in the Southeastern States, called by the United States Commissioner of Education, at Raleigh, N. C., December 6 and 7, 1926. Abstracts were prepared from manuscripts submitted by the authors. In no case is the address reproduced in complete form.

The second supervisory conference was called at the request of the first supervisory conference, held in Nashville in December, 1925, for the purpose of further developing certain phases of supervision discussed at that meeting, and to initiate additional measures for the improvement of supervision.

The conference was attended by more than 100 rural educational workers, most of whom are engaged in State and county supervision. The States represented were Alabama, Arkansas, Georgia, Florida, Kentucky, Louisiana, Maryland, New Jersey, New York, North Carolina, Oklahoma, South Carolina, Texas, Tennessee, and Virginia. The United States Bureau of Education was represented by two members of the staff of the division of rural education.

The program presented at the conference was arranged to consider the four large problems indicated by the Roman numerals in the table of contents; under each of these at least one major paper or address was presented, followed by free discussion from the floor. The nature and content of the program bear witness to the fact that supervisors have recently made considerable progress in bridging the distance between modern educational theory and practice under actual schoolroom conditions. This progress, as recorded in the present bulletin, has been mainly in three directions: (1) Adapting supervision to group differences among teachers and to conditions in larger rural schools whose principals are beginning to share supervisory responsibilities; (2) identifying rural supervision actively with modern research movements; (3) adjusting the curriculum in order better to fit the instruction offered in rural schools to the life and needs of rural children.

I

RURAL SCHOOL SUPERVISION

I. Problems Concerned with Efficiency of Rural School Supervision

Adaptation of Supervision to Group Differences among Teachers

ISOBEL DAVIDSON

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The function of supervision is the improvement of instruction, the encouragement of good work, and the constant elimination of misapplied energy. Expert supervision renders a service to the teacher, the pupils, and the community. It helps the teacher to a broader vision of teaching problems; it secures to the children increasingly better opportunities for normal growth; and it stimulates community interest by coordinating school and home activities in wholesome ways.

The aim of the supervisor is to preserve and enlarge personality. She helps each teacher to gain control of teaching technique, desirable skills, and usable knowledge; and to form such habits of thinking, feeling, and doing as will result in desirable professional attitudes and appreciations.

Constructive supervision is a shared responsibility.—The supervisor and teacher are coworkers on common problems. Each stimulates the other to best effort. Shared responsibility in the solution of such problems as the following contributes to individual progress of both: (1) Securing objective data which give insight into teachers' responsibilities along such lines as compilation and use of an age-grade census and attendance statistics, the use of results of standard tests, and determination of the causes of failure in first-grade reading. (2) Setting up standards for evaluating progress, and for the selection of subject matter, methods, and class organization. (3) Evaluating various activities as they function from day to day, and as they affect standings entered upon pupils' reports and teachers' self-rating cards.

Intelligent participation of teachers and supervisory officers in the solution of these problems is a distinct aid in the improvement of classroom instruction, upon which major supervisory emphasis should be placed.

Educational philosophy as a guide in supervisory activities.—Our conception of supervision has grown through diagnosis of needs and an increasing appreciation of Dewey's educational philosophy as interpreted by Kilpatrick and others in terms of "whole-hearted, purposeful activity." A sound educational theory based on this philosophy is expressed in a number of books, but is not yet to any appreciable extent made over into reality. However, hopeful signs of a scientific attitude among supervisors and teachers and some attempts to apply modern educational philosophy to school situations are apparent. Our fundamental concern as supervisors should be to provide learning and teaching situations among teachers comparable to those which we believe should function in the classroom. By associating accuracy of performance with pleasurable undertaking, and by securing learning situations in which problems naturally arise, solutions for which are found through cooperative effort, we shall make progress. Intelligent participation is the keynote in the teacher's work with children and in the supervisor's work with teachers. The supervisor can not expect teachers to create a natural, reasonable social situation calling for pupil participation unless she also creates it in her contacts with teachers. The easier thing for the supervisor to do is to plan and assign the work and to build up docility, creating an intellectual coma and fixing habits of mental inertia in each teacher. The difficult (and right) thing to do is to organize the work and direct a train of thought so adroitly that certain goals or objectives grow out of an expressed need of the group, with the supervisor as a friendly assistant and guide working out plans of procedure for their accomplishment. Right application of educational theory, with less prescription and more participation, challenges teachers and supervisor to adopt the problem-solving attitude, to grow in the ability to purpose and plan, to evaluate subject matter and method at their true value, to take criticisms good-humoredly, to give suggestions courteously, and to show consideration and respect for the opinions of others.

Weaknesses inherent in customary types of grouping teachers for supervisory purposes.—As an aid in diagnosis of teachers' needs and in enlisting their whole-hearted activity supervisors generally employ some method of sectioning teachers into groups. Doing this on such bases as those of grades or subjects taught, size and location of school buildings, or geographical distribution of schools, has long been common. The members of these teaching groups vary in professional zeal, in preparation, in experience, and in possible accomplishment.

The lecture method generally prevails, with some attempt to organize small, more homogeneous groups within the larger ones. Undoubtedly some types of work have been and may be well done under these circumstances. Moreover, the benefits that come to members through personal and professional relationships are considerable, apart from common interest in problems discussed. There are weaknesses, however, frequently associated with grouping along such lines: (1) Supervisors touch some teachers with the glowing heat, while others sit out in the cold. (2) The instruction provided savors of mass teaching; it is difficult to provide adequately for teacher participation or for helping the mechanical teacher, the complacent teacher, and the beginning teacher, to grow to the fullness of their powers. (3) The results fail to satisfy the conscientious supervisor who knows that, could the latent power of any teacher be directed through appropriate means, the return in satisfaction and skill would be more than a hundredfold. Another kind of organization must be adopted if supervision is to be well adapted to group differences among teachers.

Advantages of homogeneous grouping over traditional types.—Just as the study of individual differences among children has resulted in better school adaptations to meet their needs and in homogeneous grouping affording better opportunity for growth of the individual at his own pace, so a study of individual differences among teachers is leading to homogeneous grouping of teachers on the basis of variability in training and experience. A survey of the personnel in any school system shows great variations among teachers in these respects. There are inexperienced teachers without professional preparation, and those with such preparation; among experienced teachers we find some who have failed to develop much skill, or are rapidly losing skill once possessed; others who have gained considerable skill and are rapidly acquiring more; and in addition, superior, experienced teachers who are the joy of all friends and officers of public education. In the following paragraphs the characteristics of these teaching groups are enumerated and some of the supervisory implications summarized.

Young teachers without professional preparation.—In some of our States young people who have just graduated from high school (and even some who have not) are permitted to begin teaching with no further preparation. These teachers have the cart before the horse. They know something of children, not much; but they know less than nothing of the materials and methods of instruction. Supervisors to whom unprepared and inexperienced teachers are assigned should study them carefully and attempt to find a common meeting ground for helping them. In some instances they may be organized into groups under leadership of principal or superior teacher, who

can help give the necessary background and training. The use of such a plan to supplement the usual supervisory activities is suggested, but at best it is a palliative. Situations of this type should be prevented through the raising of certification requirements.

Young teachers with professional preparation.—The standard equipment of inexperienced, professionally prepared teachers may be thus summarized: They come to the school system armed with good habits of work, certain technical skills in lesson planning, and in the teaching of such subjects as handwriting and silent and oral reading; definite standards by which to measure accomplishment of children, of the teacher, of housekeeping, and the like; desirable attitudes toward work, associates, and children; natural characteristics essential to success in teaching, without the possession of which they would have been eliminated during the process of preparation.

The abilities just enumerated are essential, but much remains for the supervisor to do. It is her responsibility to help young normal-school graduates (1) approach all teaching problems in a scientific spirit; (2) work intelligently to produce necessary changes in children. By placing emphasis upon the teaching act rather than upon the teacher, the supervisor aims to free the young teacher from self-consciousness; to lead her to observe and study children in the spirit of a laboratory worker who holds test tubes in which she has mixed human elements and various stimuli. Just the right proportion of each with just the right heat will produce the desired result, S-R, the bond. Sometimes the experiment will fail, the color will be gray when it should be all gold, or the test tube will be shattered; but that should not deter nor discourage the laboratory worker—the teacher—from trying again, for the formula is right. The supervisor assists these young teachers to center attention where it should be, on fulfilling the conditions of the experiment and on its outcome.

Types of experienced teachers and their needs.—(1) Experienced teachers who have never attained much skill or who are rapidly losing the skill they once possessed are a problem. For some reason or other they have approached or are rapidly approaching a "dead end," with little desire for professional improvement. In the teaching profession there are comparatively few leads to higher positions, administrative or supervisory, while tenure offers safety without much effort; therefore complacency tends to result in a certain percentage of cases. Teachers of this type may be roused from their lethargy through the onward sweep of all the others and through a reawakened desire to keep up with the procession. Participation in small groups, acceptance of specific responsibilities, and recognition of definite problems to be attacked by both teacher and supervisor will generally arouse the pride of a teacher of this type and lead her to exert herself to the limit of her ability.

(2) Many experienced teachers are rapidly acquiring more and more skill through learning to apply all that is best in their teaching experience to new situations. Their practice challenges the truth of the view (until recently universally held) that all the teaching skill possible is achieved during the first four or five years of experience, for they are eager to grow professionally as long as they teach. A supervisor's task includes that of inspiring teachers during their first few years in the schoolroom to attain skill, to desire ever more skill, and to work for its attainment. An important supervisory service is thus rendered in guiding all teachers, so that the development of experience and skill will go hand in hand. It is safe to say that the percentage of developing experienced teachers in any school system bears a direct relation to the extent of the period during which supervision of a high order has obtained, and that the maintenance of the right attitude among teachers toward the necessity of continuing their professional growth becomes a comparatively easy supervisory responsibility, provided they receive guidance of a high order during their earlier years of teaching.

(3) Teachers with five or six years of experience, whose devotion to the immediate task is unquestioned, often desire to specialize in some particular field of education and exhibit an interest in trying to find the line of work to which they are best adapted. For such "explorers" (to quote Doctor Bamberger's appropriate word), the supervisor's task is to provide opportunities: (1) For discussing with them personal and professional equipment, and (2) for spreading out before them the various fields of educational service, such as rural, kindergarten, elementary, junior high school, measurements, supervision, and administration. There should be constant sharpening of purpose and of plans for the future in order that a wise decision may be reached.

(4) As a result of much native teaching ability, experience, and extended preparation, both preservice and inservice, some become master teachers. Do they need supervision? Most assuredly. They deserve the satisfaction of approval of work well done; they need, too, to feel the urge of experimentation, of testing new materials of instruction and new methods of work. Opportunity should be provided for creative work, for exercise of leadership, for service of many kinds. In addition, the supervisor, as a salesman of educational ideals, should bring to the notice of teachers generally instances of outstanding teaching success among master teachers, thus tending to develop in every teacher professional pride in the accomplishment of colleagues, accompanied by confidence that the work of any teacher meriting special recognition will receive it.

Necessity of following a personnel survey of the teaching staff with a suitable supervisory program.—Granting that supervisory

practices, as a whole, should be based upon analytical knowledge of the characteristics of teachers similar to the personnel survey indicated above, let us consider some adaptations of supervision found useful in a particular situation; supplementing this with a brief discussion of two adaptations (provision for experimental work and for recognition of superior teachers) which the writer believes are to play an increasingly large part in the future of supervision.

Types of supervision adapted to needs of young, prepared teachers.—In Elizabeth, N. J., to illustrate from the school system for which the writer has considerable supervisory responsibility, no beginning teachers without preparation are employed. Their needs will therefore receive no further consideration during the remainder of this discussion.

The Elizabeth program is based on the theory that a group of young prepared teachers, meeting frequently for demonstration teaching, discussion, and counsel during their probationary period, under systematic, intelligent leadership, will grow more in confidence and in power to do professional work if they are not subject to the restraining influences of experienced teachers. Many difficulties have been prevented or overcome in Elizabeth as a result of the following preventive measures made use of over a period of two or three years by the superintendent, the supervisory staff, and principals:

(1) Small meetings, in which teachers under supervisory guidance are helped to find and use materials of instruction. At these meetings teachers talk freely and informally concerning such aspects of the situation confronting them, as: Disciplinary problems which have arisen; social and professional relationships in terms of their bearing upon the work of superintendent, supervisors, principals, and teachers, and upon the school system as a whole; community problems known through personal contacts; and selection and use of school equipment. Supervisory officers use the opportunity presented to render help along all these lines and to secure the interest of teachers in first-hand study of children and of general professional literature relating to childhood.

(2) The meeting of small teacher groups, under leaders chosen by the members. These groups meet for such purposes as discussion and evaluation of class teaching observed by the group, or of data gleaned from books; the exchange by teachers of reading units, lesson plans in reading, in history, and the like.

(3) Paired teacher activity, characterized by cooperation between a teacher-leader and a teacher seeking help. The teacher-leader in each case helps her colleague to use the particular technique essential to a specific application of the project method, or to discover the procedure necessary to the formation of a specific habit, or to the better use of an appreciation lesson, and the like.

Supervision adapted to experienced teachers.—Differentiation of supervision for experienced teachers in Elizabeth functions chiefly through the use of committees, case studies, and cooperation in teacher training. In the use of each of these, the needs and abilities of experienced teachers who have failed to make good, of those who are developing more and more skill, of explorers and of master teachers, are kept in mind, and each one is assisted to participate to the extent of her powers, and is made to feel the worth of her contribution. The aim is to provide as many opportunities as possible by means of which a greater proportion of teachers may develop into superior teachers, and superior teachers may continue to develop their potentialities.

Committees organized under leadership of teacher, principal, or supervisor, may work on such a project as course of study construction, or the further interpretation of the course of study as it relates to detailed subject matter and method. They may study any one phase of the activity of children or of the school organization. They may outline essentials of satisfactory rating cards for teachers, or report cards for pupils. They may plan demonstration teaching in which the work is done by volunteer superior teachers or principals.

The research work in local history, carried on by Elizabeth teachers under committee management, has as its specific aim the collecting of data for the better interpretation of American life through a deeper understanding of the homelands from which so many of the children's parents have recently come, a type of historical research particularly appropriate in a community composed of many recent emigrants.

Supervisors in other places may find it advisable to have history committees undertake research work similar to that done by teachers in Baltimore County some years ago, who with their pupils collected materials relating to local history. As one of the results of this undertaking, "Real Stories from Baltimore County History" was published as a cooperative piece of work covering a period of five or six years, which aroused much interest and afforded considerable professional stimulation of a high type.

We are finding that the committee work of teachers along the above and other lines has great inherent possibilities in supervision.

Case studies.—Case studies offer a good opportunity for training principals and teachers in observation, analysis, and evaluation of teaching. Through the use of such studies, assigned by the supervisor or self-assigned, principals who are without preparation for supervision learn to clarify their thinking, and improve their practice of the supervisory art. Useful as are case studies in improving teaching technique, they are even more valuable in improving the technique

of supervision whether done by principal or general supervisor of instruction. They put the problem in an impersonal fashion before the teacher and the one supervising, thus tending to develop a scientific attitude. Careful investigators in law and medicine have long used the case method. We are finding it equally valuable in education.

Superior teachers as training teachers.—Certain teachers in the Elizabeth city school system act as training teachers in connection with the State normal school. They have special meetings with supervisors for discussion of training problems and are released from classrooms to spend from a day to three or more days at the normal school. For discussion of common problems small groups of teachers are organized in school buildings having two or more training teachers.

In several places where it is not now done, superior teachers might render a similar service in the preparation of prospective teachers. The teaching corps of any community rendering the service would gain in return, through close contacts with young student teachers and with the best that the teacher-preparing institutions have to offer.

An adaptation of the above plan, useful in counties remote from as well as those adjacent to State normal schools, is one in which arrangements are made at regular intervals for a teacher to leave her own class in charge of a pupil teacher in order to visit the class of a coworker in the same building for observation of a unit of work. This type of paired-teacher activity should prove helpful wherever pupils are trained, through daily participation in group activities, to conduct class work for short periods independent of the regular teacher; and teachers are helped to select the recitations which will tend to stimulate greater skill on their part. In Elizabeth classroom activities proceed as usual, even while the principal holds a short meeting with classroom teachers. Cooperative effort between strong teachers on the one hand and inexperienced, or complacent, or discouraged experienced teachers on the other aids in the solution of many problems.

Experimental work.—Attention is invited to two supervisory activities destined to affect favorably the future of supervision: Experimental work, and recognition of teaching excellence. Experimental work by superior teachers, whose interest in children and the learning process warrants the expense of materials, time, and money involved, should be undertaken in each school system, thus providing opportunity for teachers who feel the challenge of unsolved problems. Some experimental work in a particular grade or subject, or with a particular group of children, is possible practically everywhere. Experimental schools under private auspices have long

pointed the way. Their success in stimulating an open-minded, alert, problem-solving attitude among teachers, challenges county and other large rural systems to undertake something of the kind as a means of growth for experienced, superior teachers, and as an outlet for their creative energy. Such schools would also prove extremely valuable to the inexperienced teachers, who would thus have an opportunity to gain a more intelligent comprehension of the application of modern educational theory.

All should be alert to recognize superior teachers.—In addition to developing qualities of leadership in superior teachers, recognition should be accorded them. Among the forms such recognition may take are the following: Honorary rewards, expressed in terms of appreciation of work by students, citizens, or fellow workers; economic rewards, characterized by additional bonuses to annual salary increments, and the like; professional rewards, such as the granting of opportunities to attend conventions, to visit other school systems, or to serve on committees as representatives of schools; recreational rewards, in which occasional leaves of absence with full pay, or a sabbatical year with half pay, allow the teacher to return to the school system after an extended period of absence with reawakened enthusiasm, increased physical vigor, and a broader perspective.

Summary.—Group differences among teachers are thus seen to be more adequately met through an organized plan of cooperative supervision in which superintendent, supervisor, principal, superior teachers, other experienced teachers of varying grades of ability, and beginning teachers all have a part. The Dewey educational philosophy, homogeneous teacher grouping, self-organized group activities, exchange service, committee work, case studies, and experimental work are among the factors in the process. Cooperative supervision aims at individual progress as a goal, to be attained through the sharing of responsibilities. It does not mean that the supervisor is to abdicate his place, and the teacher is to run her own little nook just to suit herself. It means that every educational worker concerned is to be held to account for better quality of work. It means more and closer supervision than ever before, but of a kind which will be desired by the teacher as a means of growth, due to the fact that she is regarded as a coworker in the great task of improving instruction.

We have taken long strides in the past 20 years toward making teaching a profession, but we need to keep in mind some of the characteristics of a true profession. Freedom and growth are two of them. Every member has a voice and an opportunity to make an individual contribution, however great or small it may be, to the sum total of the truth known to the profession. In proportion as it

helps to promote the attainment of such professional characteristics, supervision will continue to vitalize the teaching body and to make good its claims.

Adaptation of Supervision to the Needs of Superior Experienced Teachers

MILDRED ENGLISH

Assistant Superintendent, Raleigh, N. C.

(In discussing the adaptation of supervision to the needs of superior experienced teachers, the speaker gave a summary of reports from supervisors in various Southeastern States, in response to a letter sent out by the Commissioner of Education; followed by an account of the work carried on in Raleigh to develop potentialities of superior teachers.)

Means Employed by Supervisors in the Southeastern States to Improve Their Best Teachers

The following summary of reports made by the supervisors (10 in all), classifies under 6 heads the means used to capitalize the potentialities of superior teachers: Standardized tests, curriculum revision, demonstration teaching exercises, participation in teachers' meetings, committee work, professional reading, and miscellaneous. The nature of the achievement along each of these six lines is indicated below:

Standardized tests.—In county-wide use of standardized tests, superior teachers participated to a greater extent than other teachers in the administration and tabulation of results of testing and in the formulation of remedial measures.

Curriculum revision.—A few teachers worked out a program of free activities; others taught one subject throughout the year wholly by the problem method. Fellow teachers became acquainted with these procedures through the visitation of classrooms in which these newer types of work could be observed.

Demonstration teaching exercises.—Demonstration class exercises were taught by superior teachers, observed by the teaching body, discussed by the teacher observers, and used to stimulate a higher standard of class work.

Participation in teachers' meetings.—Superior teachers, selected to discuss certain topics assigned by the supervisor because of procedures observed in their classrooms, participated actively in teachers' meetings. Such participation was substituted in part for the customary lectures by professional lecturers.

Committee work.—Committees formed of superior teachers (1) worked on improvement in teaching one or two subjects; (2) listed types of errors found in tests. Supervisors distributed results in mimeographed form to the general body of teachers.

Professional reading.—In some counties supervisors placed their own professional books at the disposal of superior teachers. They advised further study with definite aims, and recommended: Summer school attendance, helping teachers to select courses adapted to their needs, and enrollment in extension courses or correspondence work offered by State teachers colleges for this purpose.

Miscellaneous.—Among several other means used by supervisors were the following: (1) Collecting and distributing to the general teaching body mimeographed copies of illustrations of excellent procedures observed by supervisors in classrooms, such as those connected with lesson assignments or drill devices, and lesson plans; (2) designating rooms of superior teachers as those in which teachers generally would be able to see good work; (3) listing outstanding qualities of superior teachers and recommending their promotion to better positions; (4) requesting that superior teachers be given a day for visitation in schools outside the county; (5) assigning such teachers some responsibility for the selection of library books and supplementary readers; (6) and suggesting that they put on pageants necessitating above-average leadership ability on the part of the one asked to assume responsibility.

Raleigh Supervisory Program

The assistant superintendent in charge of elementary instruction and the elementary principals of the city of Raleigh are responsible for the supervisory program.

The results of a time-distribution study, made by the Raleigh elementary principals in the spring of 1925, emphasize the following: Supervision is the chief function of a principal; he should, therefore, find time for it and should initiate and carry on a definite program for improving instruction in the school building of which he is the head.

Our principals accept this responsibility. They are free to call on the assistant superintendent for aid in case of need, and thus are able to meet specific teaching problems more easily, and to keep their schools in line with the policies and standards adopted for the system with their cooperation at the bimonthly meeting of supervisor and principals. The growth of our superior teachers professionally during the past year is due in great measure to the cooperation given the supervisor by the principals in the use of the following as means for such growth: Visitation of classrooms followed by conferences; raising standards of class work through use of key teachers; initiating, carrying on, and recording activity and project work; formation of an elementary education council; appointment of committees and assignment of work to them; and organization and use of a professional library.

Visitation of classrooms.—The supervisor on arriving at the school learns from the principal what help he has been able to give teachers, the names of teachers who have requested any particular help, and of those who need help irrespective of whether or not they have requested it. Following this conference principal and supervisor visit the classroom together. A conference follows between each teacher visited and the supervisor. Before leaving the building supervisor and principal talk over class work observed and individual conferences held.

Raising standards of class work through use of key teachers.—A supervisory program succeeds to the extent that it enlists the enthusiastic support of the teachers. This support depends in part on giving representatives of the teaching body a share in the formation of the program. These representatives in Raleigh are designated as "key teachers." A key teacher is assigned to each school and encouraged to use her own initiative, to leave the beaten path through recognizing a definite problem and working to solve it, carrying out an experiment, or doing creative work of some kind.

Such a teacher, trained to see the possibilities of free activities, of projects, and large units of work generally, can do much to bring about a new viewpoint on the part of other teachers not prepared along modern lines. At first the key teacher goes ahead quietly and no special attention is called to what she is doing. Pupils in rooms in which work of the conventional type is carried on, hearing of the new-type activities, ask their teachers to allow them to engage in similar projects. Soon a courageous teacher, feeling the need of informing herself, asks the key teacher about the projects attracting so much attention. She is told that the pupils will be glad to give the information. Following the recital by the pupils, the key teacher suggests lists of helpful reference materials and offers to assist the teacher asking aid to initiate a project and carry it forward to completion. The leaven has begun to work.

The supervisor guides and helps key teachers and pupils to find and collect materials and to plan excursions growing out of the activities. She keeps key teachers informed of developments along lines in which they are working through preparation of bibliographies as needed, and the like.

Activity and project work.—Under the direction of Dr. Thomas Alexander, of Teachers College, a group of teachers and principals cooperating with the supervisor worked out a form for recording outcomes of activities or projects. This form serves as a guide to teachers working along this line for the first time. It calls for (1) initial indication and interest; (2) materials employed; (3) development; (4) outcomes in skills, knowledges, ideals, attitudes and

habits, and in the various school subjects; and (5) other projects growing out of the activity.

Formation and work of council.—The elementary educational council, organized so that all teachers might keep in touch with the activity and project work going on in the system, was formed as a result of the interest of the primary teachers. The council soon included the entire elementary teaching force upon the request of the upper grade teachers, who desired to keep informed as to the work done in the early grades so as to utilize it to the best advantage.

The council publishes a mimeographed bimonthly bulletin. Each issue reports briefly the various activities going on in the different schools and gives a detailed account of one or more activities or projects. A teacher-reporter in each school collects news, persuades teachers to write up activities, and sends in the material to the executive board composed of officers whose members pass on the material and send that selected for publication to the supervisor, who assembles and edits the material for mimeographing. The executive board assembles the bulletin when completed and distributes it to the schools.

The first yearbook of the Raleigh Teachers' Council is ready for distribution. It contains a 39-page bibliography of activities and projects by grades in the books and materials in the teachers' professional library, with definite page reference to save time of individual teachers in looking up any of the various activities.

The council has recently enlarged its work through the appointment of several committees. Some of the studies undertaken by them are: Type of report given to primary children, with suggestions for improving on the present system; results obtained through administration of standardized tests in reading and problem solving and through application of appropriate remedial measures; a suggestive list of activities for each elementary-school grade; a report of first steps in curriculum revision. The work in curriculum revision, carried on under the direction of Dr. Thomas Alexander, who has met with the curriculum committees several times, is of especial interest. During the first year teachers read widely in order to become acquainted with progress in curriculum revision to date. This reading created a desire to participate in the study. Last year the different curriculum committees formulated objectives in the various school subjects. This year the committees selected specific units of subject matter to be taught in each grade, and made suggestions as to materials, methods, and correlations to be used.

Membership of teachers on committees is voluntary, each teacher selecting a committee on which she wishes to work. Superior teachers naturally assume leadership, but participation in committee serv-

ice has been widespread among the teaching body, and has resulted in increased interest in the reading of professional literature and in the newer type of school organization.

Organization of a professional library.—A small professional library, open daily for the use of curriculum and other committees, has been provided at the high-school building and is used by teachers every afternoon in the week. As many as 20 teachers often use the library on Monday afternoon, as the supervisor is at hand at that time to assist them in finding articles of special interest. A monthly mimeographed list of titles of current magazine articles, selected by the supervisor for the use of teachers, is posted in each school building and serves as a guide.

Other means employed.—Of many other means employed, mention may be made of encouraging teachers to write for publication and to attend summer schools; and asking them to test and evaluate new textbooks before their introduction into the school system.

Summary.—The thought underlying all this work is that of making leaders of superior teachers along definite lines of thought and experiment. By assisting them to discover new paths to success and to cooperate in research work our superior teachers have become essential factors in the improvement of elementary teaching in Raleigh.

Interdependence of Principal and Supervisor

PAULINE O'ROURKE

Rural School Supervisor, Mobile County, Ala.

Present-day rural-educational leaders are agreed as to the following: (1) The elementary principal should be a professional leader with administration and supervision, not teaching, as his chief responsibility; (2) the emergence of the principal as such a leader does not eliminate the need for general supervisors; (3) close cooperation between principals and supervisors is necessary to avoid waste and duplication of effort.

This paper is written in agreement with the point of view just expressed. The writer believes there is great need of attaining a clear view of the issues involved in the necessary adjustment of the work of supervisors and principals, and that to further this need a brief résumé of the studies already made in the field and a report of the first-hand study recently carried on should be of assistance to all interested in bringing about conditions favorable to: (1) Efficiency on the part of supervisors and principals in their respective fields; and (2) full cooperation between principals and supervisors.

A brief summary of present conditions.—As supervisors are late entrants in the rural-school field and principals relieved of teaching

are still more recent, studies made during the past 10 years have been chiefly in relation to village and city-school conditions. However, conditions described are similar to those at present obtaining in rural schools, and may be considered typical of them. Conclusions deduced from studies undertaken are: (1) A gap exists between educational theory and present practices in many places in relation to the duties of principals. Theory would assign supervision as a principal's chief function. In practice his duties are chiefly administrative in the absence of teaching requirements; (2) supervisors and principals have, to date, done little to determine the limitations and interrelations of their respective fields; (3) superintendents, teachers, school board members, supervisors, and the general public frequently attach little importance to the duties of principals.

If we accept the statements above as a formulation of opinion so far expressed, it is safe to say that principals relieved of teaching should share with supervisors the responsibilities along supervisory lines.

Nature of investigation conducted by writer.—To obtain a clear view of present practices among principals and supervisors in the rural-school field, a questionnaire was sent to 300 principals and supervisors scattered throughout the Southeastern and other States, asking them: (1) To name types of activities occupying their time; (2) to name ways in which the principal helps the supervisor; (3) to name ways in which the supervisor helps the principal; (4) to make a list of additional suggestions for principal-supervisor cooperation. Fifty-nine replies were received—32 from principals, 27 from supervisors. They may be thus summarized:

(1) In naming types of activities which engage their time principals and supervisors indicate that they do many of the same things, including the following: Administrative duties, demonstrative teaching-exercises, observation of classroom instruction, holding of individual and group conferences with teachers, administering, checking, and interpreting tests, followed by remedial work, assisting with experimentation, conferring with parents, inspecting buildings and grounds, ordering and distributing supplies and equipment, classifying pupils, helping weak teachers with methods and management, assisting in parent-teacher association work, putting on health attendance and publicity campaigns, and working with committees on curriculum and other problems.

To quote McClure:

> In the opinion of teachers, the function of the principal varies from the menial service of errand boy to the high prerogatives of the autocrat; the public thinks of him as the man who sits in the office; the pupil, as "the guy that licks the kids"; the view that has been taken by superintendents is that he is to follow directions from the office.

More progress has been made in developing an exact idea of the nature of the supervisor's work. To quote Doctor Dunn:

> Instructional supervision has the large purpose of improving the quality of instruction, primarily by promoting the professional growth of all teachers, and secondarily and temporarily, by correcting deficiencies of preliminary preparation for teaching by training of teachers in service.

Burton and Barr, in their recent volume on supervision, state that supervision is "coextensive with the range of things physical and spiritual which are primarily concerned with bettering the conditions that surround learning." They suggest the following as influencing learning conditions: Skill of the teachers, selection and organization of subject matter, selection and standardization of materials of instruction, research and experimentation, use of educational tests and measurements.

(2) Principals name a few important activities not included by supervisors, such as teaching regularly for absent teacher, or for teacher that is visiting; directing work of janitors; attending to disciplinary cases; enrolling and transferring pupils; answering telephone; organizing and boosting clubs; supervising playgrounds. As is evident, these activities do not represent the supervisory side of the principal's work.

Supervisors name a few activities not found among those given by principals in their lists: Preparing bibliographies upon subjects studied by pupils, preparing seat work, traveling from school to school, distributing circulating libraries, and holding conferences with principals.

(3) Both principals and supervisors include the following among ways in which principals help supervisors: (1) Principals carry out objectives selected for individual school and for system as a whole; (2) they interpret supervisory programs to teachers and patrons, securing cooperation of patrons for program; (3) they confer relative to bringing out weak points of individual teachers for the purpose of improving and developing their teaching power; (4) they help supervisors to become better acquainted with personnel of the teaching force, call attention of supervisors to teachers that need help and to those doing especially well; (5) they do follow-up work after visits of supervisors, by seeing that teachers carry out supervisory plans and suggestions; (6) they see that materials of instruction needed are at hand; (7) they assist with test programs, study results, and use information gained in remedial work; (8) they assist supervisor with classroom supervision, with improving course of study, with compilation of records and reports.

(4) Ways in which supervisors help principals, as named by both principals and supervisors: Supervisors do much of the actual supervision of classroom work; discuss with principals suggestions made

to teachers; furnish them with copy of all materials sent teachers; ask them, through their principals' association, to aid in working out special problems; help to keep principals informed of latest developments in the field of elementary education, and of things of interest in county and other school systems; assist in organization of schools at opening; hold meetings with principals at which problems introduced by principals are discussed; cooperate in classification of pupils and in the recommendation of promotions; diagnose teaching situations, and suggest to principals ways in which help can be given to improve classroom instruction; encourage work along some distinctive line in each school; recognize the principal of each building as the professional and administrative head of the school.

(5) Suggestions relative to clarification and definition of duties of supervisors and principals, such as holding conferences before the opening of school, and more frequently during the school session; preparation of principals in elementary school work so that they may be able to judge a recitation and to know when progress is being made; more actual teaching on the part of the supervisor; more active participation on the part of the principal in planning the program; willingness of each to learn from the other; willingness of supervisor to modify plans to meet needs of school; delegating to principals full charge of test programs in schools.

A summary of replies and conclusions indicates that rural principals are becoming supervisory officers to a considerable extent; that the supervisory duties of principals strengthen the attainments of the supervisor; that the assistance of the supervisor broadens the field of the principal; that principals and supervisors are alert to the question of need of further clarification of duties; that time free for supervision on the part of principals is considered necessary (all principals reported giving some time to supervisory duties, the range extending from 10 to 85 per cent); that principals through professional study, assisting in testing and experiments, participating in conferences with supervisors, and working with committees are becoming gradually better fitted for supervision.

Principals can do more than supervisors to help teachers interpret courses of study and discontinue wrong practices. The principal, as the person acquainted with local needs and intimately informed of day-by-day developments in the school system, is able immediately to study results with teachers and plan necessary remedial work.

Supervisors free from building responsibilities are indispensable as consulting experts. Their contacts with many teachers and principals redound to the enlargement of the vision of each principal and teacher.

As supervisors become more and more expert in learning to work through principals in such a way as to expedite the realization of

the common aim of both, the improvement of teaching, much more will be accomplished. To do this supervisors need, first of all, to distinguish between the supervisory technique essential (1) working with teachers in one-room schools; (2) working with teachers in small central schools whose principals have no time free for supervision; (3) working with teachers in large schools whose principals are expected to supervise.

Supervisors and principals need also to appreciate that interdependence implies, first, that each principal has his own distinctive duties as truly as each supervisor; second, that principal and supervisor working together should determine the policy by means of which they may contribute most effectively to their joint task.

Fundamental Issues Involved in Adjustment of the Work of Supervisors and Principals

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As early as 1917 educational diagnosticians began to turn the searchlight of scientific inquiry upon the principalship, particularly the elementary principalship. Since that time no branch of the profession has been diagnosed, investigated, X-rayed, searched, and researched more than has the principalship. Candidates for doctors' degrees have vied with university professors in their eagerness to expose shortcomings of principals. Educational magazines, convention proceedings, and survey reports have repeatedly reflected professional opinion.

The verdict has been on the whole unfavorable. The diagnosticians, weighing the principal in the professional balance, have declared him wanting. He was found to be giving a major portion of time to office routine, to odd jobs about the building, and to keeping the machinery of the school well oiled, a natural consequence of his lack of vision, initiative, and technical training—three indispensable qualifications for professional leadership. Bobbitt sums up his view of the existing situation thus: "There is a dearth of accepted ideas as to the specific things of a professional character that principals should do. It seems that we have relatively few clarified ideas as to the nature and place of the principal's work within the system." Other prominent writers on the subject state that the shortcomings of principals are due mainly to the fact that most of them have had no systematic training for their real job—supervision. One investigator asserts that the principal is often more in need of training in the technique of supervision than teachers are in the technique of teaching.

Progress in professionalizing the elementary principalship.—As a result of the publicity given to conditions described above, it was hoped that the principalship would experience a professional renaissance. This hope has been measurably realized. Recent professional literature and the testimony of educational leaders indicate that much interest has been aroused, among elementary principals in city school systems, in the study of instructional problems. The organization and type of work undertaken by the National Association of Elementary Principals are among the hopeful indications. To date little has been done to determine to what degree the movement to professionalize the elementary principalship has affected the principals whose field of service is in rural education.

The situation in Louisiana.—The 17 parish supervisors in Louisiana have devoted attention chiefly to small rural schools. They have seldom attempted to improve instruction in school systems in which elementary and high school grades are housed in one building under the jurisdiction of the same principal. Such systems represent the type commonly found in the State outside of the two largest cities.

Except for occasional visitations by members of the staff of the State department of education, principals of schools employing 10 or more teachers have had few supervisory visitors. Naturally not much has been generally known by parish supervisors as to the amount or type of assistance rendered by such principals to teachers under their jurisdiction, except that they are assigned little or no teaching in order that they might assume responsibility for improvement of class work generally.

About a year ago State Superintendent Harris raised the question of the efficiency of the high-school principal as a supervisory officer. He asked administrative officers to consider the feasibility of planning a program that would: (1) Require high-school principals to devote four-fifths of their time to teaching; (2) delegate supervision of the larger as well as of the smaller schools to supervisors employed solely for this purpose. The plan contemplated no additional funds, as the salaries of one or two capable supervisors, charged with responsibility for several schools, would be paid from the money saved by the reduction in teaching force. (The assignment of a teaching load to principals would naturally reduce the number of teachers needed.) Superintendent Harris stated as a reason for raising this question that few principals have the technical training and experience necessary to fit them for classroom supervision.

To date no additional steps have been taken to carry out the plan. The question may have been raised to stimulate principals to study instructional problems, and to suggest to supervisors to give thought

to methods of adjusting work of supervisors and principals. If this was the purpose the State superintendent's efforts have met with success: (1) Principals have developed a more professional attitude toward supervision and a number have become earnest students of professional literature on this subject; (2) supervisors have awakened to the need of studying how to work with and through principals. The following account of what was done in one parish to study issues involved in adjustment of the work of supervisors and principals is offered as an initial investigation in a field deserving further detailed and extended study.

The Rapides Parish study.—After observation of considerable class work and study of results obtained through the administration of standardized tests, the supervisor decided to study: (1) Qualifications of principals; (2) their time distribution; and (3) supervisory agencies employed by them. In order to ascertain necessary data, the three questionnaires described below were prepared and distributed.

(1) *Qualifications.*—The aim of the first questionnaire was to ascertain the qualifications of principals of Rapides Parish for supervisory work in terms of training and experience. A summary of the replies received follows:

The number of years spent in college ranged from 4 to 5½ years, with an average of 4.44. Eight principals are graduates of teachers' colleges; 4 are graduates of liberal arts colleges; all of the latter and 6 of the former have taken post-graduate professional courses. To the question, "Have you had a college course within the past 5 years in the supervision of classroom instruction?" ten replied in the affirmative. An average of one-half of them attend summer school every summer.

Experience in present positions ranged from 3 months to 16 years, with a median of 4½ years. Previous experience as principal ranged from none to 16 years, with a median of 3 years. Five principals had received in the parish part or all of their previous experience as principal. The range of teaching experience, previous to promotion to the principalship, was from 1 to 12 years, with a median of 5 years. This information seems to warrant the conclusion that the principals, from the viewpoint of professional training and experience, are qualified for supervisory work.

(2) *Time distribution.*—If principals are to become efficient supervisors of instruction, they must be convinced that supervision is the principal's most important job, that it is a duty requiring technical and expert knowledge, and that time must be found for it. It is a matter of common observation that the principal often finds it difficult to distribute time equitably among various professional duties.

The second questionnaire was used to ascertain the present status of time apportionment in the parish. The results are indicated in the following table:

Time distribution of 11 Rapides Parish principals

[Distribution of time from 8.30 a. m. to 4.30 p. m.]

Duties	Highest per cent	Lowest per cent	Median per cent
Clerical and records	20	3	10
Administration	42	10	20
Professional reading	10	0	5
Teaching	50	0	15
Supervision	60	15	40
Other duties	35	0	7

It will be noted that routine office work claimed from 3 to 20 per cent of time. Detailed data show that 4 principals were above the 10 per cent median. The writer is convinced that no principal can justify giving 20 per cent of his time to routine office work. Work of this type can be largely delegated to others. The principal can usually find teachers among the corps willing to do routine office work, and able to do it better than he can.

Administrative duties claimed from 10 to 42 per cent, with a median of 20 per cent, which is not too high according to the opinion of most authorities. Teaching ranged from no time devoted to it to 50 per cent, with a median of 15 per cent, or approximately an hour a day. Cubberley, in the Portland Survey, states that a principal should teach 4 or 5 hours weekly. Three of our principals teach two high-school classes per day, in addition to keeping study hall. One principal teaches two 90-minute classes, totaling 50 per cent of a 6-hour day. No principal is in a position to do effective supervisory work who is burdened with the amount of teaching assigned several of these principals.

The time given to supervision ranged from 15 to 60 per cent, with a median of 40 per cent. Teaching is not altogether responsible for this low median, since one principal, who does no teaching, gives 25 per cent of his time to supervision; and another, who teaches only 1 hour daily, gives only 15 per cent. Moreover, a principal who teaches 27 per cent of the time devotes 48 per cent of the time to classroom supervision. A principal who devotes only 15 per cent to supervision states that "other duties" claim 35 per cent of his time.

Results of the second questionnaire plainly indicate that some principals need to evaluate supervision more highly, and that a number need assistance in finding time for it.

(3) *Supervisory agencies.*—Replies to the third questionnaire, designed to obtain data relating to supervisory agencies, revealed the following: All the principals (12 in number) made use of teach-

ers' meetings, visitation of class work, and standardized tests; 11 made use of personal conferences with teachers; 9 held special group meetings; 5 provided for demonstration teaching exercises. These results indicate that principals are using the customary agencies. Other sources of information were to the effect that several principals appreciated their lack of expertness in the use of such agencies.

Adoption of a supervisory program.—Having learned, through the use of the survey, something of the weak places in instruction and of the instructional needs of the parish, a supervisory program was constructed, setting up a number of definite objectives which would (1) tend to emphasize supervision as a major activity of principals, and (2) provide opportunity for the supervisor to assist principals in the performance of this major activity.

The program included the following: (1) Improvement of instruction in reading and arithmetic; (2) raising the standard of instruction generally, through careful planning of lessons; (3) better use of supervisory agencies. In carrying out the first part of the program it was decided: (1) To work chiefly on improvement in teaching reading to beginners, and on proper silent and oral reading procedures in the middle and upper grades; and (2) to limit efforts to improve instruction in arithmetic to approved techniques in problem solving. Use of Monroe's reasoning test had disclosed the fact that pupils need to acquire a definite plan of attack in solving problems. To help bring about the greatest amount of improvement in a stated time, definite procedures for the teaching of reading and arithmetic were formulated, and recommended as a guide to teachers.

As a guide to better preparation for teaching content subjects, the assignment-study-recitation-test lesson recommended by the State department of education was adopted. By concentrating attention upon what constitutes a good lesson plan, and by singling out the assignment, the supervised study period, and the oral and written phases of the recitation for special study, interest was aroused among teachers in being well prepared for each day's work.

Supplementing these measures, the supervisor lectured at every opportunity on lesson planning; and later prepared the lecture in circular form for distribution among teachers. Illustrative lesson plans were prepared, mimeographed, and distributed. Teachers were invited to send in samples of lesson plans used by them, to be mimeographed and sent to other teachers. We adopted the slogan, "I plan every lesson I teach," and offered a prize for the best book of lesson plans. The effect of these activities in raising standards of classroom instruction has been most salutary. No part of the supervisory program has taken better with principals than has lesson planning.

Improvement of supervisory agencies.—Satisfactory cooperative arrangements were made designed to improve teachers' meetings and visitation of class work. The type of group teachers' meetings eventuating may be cited as a measure of the success of the arrangements. Group meetings are usually held at centrally located high schools where it is easy to assemble a group of from 15 to 30 teachers. Care is used in making programs, copies of which are sent to group members a week or more in advance. Programs, which are built around the major supervisory objectives for the year, usually include the following: Demonstration class exercises by the supervisor, or by an expert in the particular teaching technique chosen for presentation, followed by analyses of procedures used; informal lectures by the supervisor; round-table discussions led by a member of the group; and the reading of carefully prepared articles by teachers. The aim has been to discuss problems and work out plans having a direct and practical application to the year's work and to recommend use by teachers, during the weeks following the meeting, of the plans formulated.

Classroom visitation is a second supervisory agency in which the supervisor has endeavored to lead the way by demonstrating to principals the value of continuous and close observation of teaching, followed by searching and exhaustive analysis of procedures and methods observed. As a result, principals realize that the 10-minute classroom visit is usually a supervisory makeshift and a waste of time. As such, it is rapidly disappearing from the parish.

In planning effective classroom observation a principal arranges his daily schedule of visitations with the aim of determining instructional weaknesses in any subject taught in the school, and of adequately following up the supervisory program thus set in motion. An account of efforts in progress to improve elementary-grade instruction in oral and written language may serve to indicate typical outcomes of classroom observation. The principal and supervisor in each school began by observing a language lesson from start to finish in every elementary grade. Notes taken during each visit were afterwards expanded into a typewritten report, and a copy sent the principal and to the teacher whose work had been observed. When the language work of all teachers had been observed, a meeting was held to discuss general weaknesses discovered. Teachers were led to see that, in many cases, they were working without clearly defined objectives. Sets of objectives for oral and written language instruction, with suggestions as to subject matter and procedures well adapted for attaining the objectives, were worked out and mimeographed. A brief study was made of them in this tentative form, with a view to improving their formulation or of adding others. At

this stage of the work the supervisor withdrew from the project and left principal and teachers to continue the work begun and to determine whether or not the objectives were attained. It was agreed that the principal should observe each teacher through one language period per week, follow this with a conference, and if necessary have a weekly meeting of the group.

Conclusion.—Effective cooperation between principals and supervisors rests on the professional leadership of supervisors. Formulation and adoption by the supervisor of a high type of supervisory program is the chief means at his disposal for establishing such leadership and for convincing principals that instruction can be improved.

In such a program standardized tests play an important part, affording the most reliable single means of instructional diagnosis. They should be supplemented by observation of class work, and by any other activities which will guard supervisor and principal against half-baked conclusions based on hasty observation, inadequate data, or faulty technique in handling data. The validity of conclusions is an important factor in establishing the confidence of principals in the supervisory program.

Summary.—Experience in Rapides Parish leads the writer to believe that persistent efforts to adjust the work of supervisors and principals are attended, among other desirable outcomes, by the following: (1) A more professional attitude on the part of principals toward, and increased efficiency in, the art of supervision; (2) development, on the part of the supervisor, of a specific supervisory technique which provides for using the services of principals in securing a greater degree of improvement of instruction in a given time than would be possible if the supervisor worked only with teachers.

II. Value of Research in the Solution of Supervisory Problems

Supervisors and Teachers as Cooperators in Research Studies

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Research, defined as "careful or critical inquiry or examination in seeking facts or principles," can not be successfully conducted in the field of education without the cooperation of supervisors and teachers. Too frequently the cooperation is of an official passive type—allowing the investigator to come in and interrupt the regular routine of school work.

The facts sought in research may be very simple items about a particular child, more complex groups of items and types of situations connected with members of a third-grade class, or the still more complex and comprehensive data on which one may base a general principle of successful instruction. It is becoming increasingly evident that the active, intelligent cooperation of classroom teachers and supervisors is necessary to the success of educational research on any of these levels.

The development of educational measurements illustrates the direction in which the larger program of modern educational research must turn. Standard tests were first devised by persons interested in gross differences between different administrative situations. Early comparisons were between a school here and one there, between gross results obtained then and those obtained now, or between the methods used here and those used there. Textbooks in measurements emphasized statistical methods of comparing groups, and the tests themselves measured great combinations of general abilities and knowledges under such titles as reading, arithmetic, composition, or handwriting.

The recent trends in measurement are toward detailed analyses of specific items of skill or knowledge in individual pupils. Teachers and supervisors are getting interested in the results of these tests as they apply to concrete cases, in the relationships among the results

of many tests given to the same individual pupil, and in what ought to be done for this individual pupil when these facts and their interrelationships have been discovered. The academic and administrative test givers are finding their testing materials, and their knowledge of the significance of their results, inadequate for answering these questions of the instructional staff. There is a growing belief that we are about to witness the development of a new and very vital science of education, growing directly out of the active interest of teachers and supervisors in the application of research tools and methods to the results of instruction.

The new science of education will be based on great collections of individual case histories, collected by teachers and supervisors, with perhaps some slight aid and cooperation from college professors and administrative officers. The records must be continuous and complete, covering every phase of the child's life and environment, and they must be accurately recorded in as objective terms as it is possible to devise. From a study of these records, showing what was available at the beginning, what was done, and what changes occurred in the child at each stage, well-defined types or patterns may ultimately become recognizable to trained educational practitioners, and the science of education may then take its place alongside the science of medicine. For the patient collection of such complete case histories, teachers and supervisors are the only possible agents. Only through their cooperation in research will this new and vital type of educational science ever become possible.

Cooperative Research Work in a County School System

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Rural-school supervisors are confronted daily with problems demanding solution. They are often compelled to solve them and to diagnose situations without sufficient data for an intelligent interpretation of conditions. Such superficial procedures fail to satisfy supervisors, and are convincing them of the need for research work in rural schools if substantial progress in rural education is to result.

Possibility for research in rural schools.—The question arises, "Is it possible to carry on research work in the rural-school field?" Perhaps not under some existing conditions which offer seemingly insurmountable obstacles to the compilation of worth-while data; however, in many modern rural-school systems research is fast becoming more and more possible, and failure to carry it on quite inexcusable. The following are among the favoring situations obtaining: Trained teachers, in consolidated schools, are teaching even

children from remote sections. Scientific tests and measurements have found a permanent place in rural schools. This is making it feasible to increase the number and types of experiments which can be conducted, and to measure experiments whose values have heretofore been left to subjective judgment. Principals of rural consolidated schools are preparing themselves to become supervisors as well as administrators of elementary grades, and are interested in increasing the opportunities for research inherent in such schools. The professional leadership of the supervisor is beginning to bear fruit. The employment of trained teachers, the use of standardized tests, the greater efficiency of principals and supervisors, increase the possibility and the obligation of carrying on systematic research. In promoting a county-wide program the supervisor, in cooperation with county superintendent, principals, and teachers, should assign a definite place to research problems.

Cooperation of teachers in research invaluable.—The supervisor should enlist the interest of teachers in research, through helping them to see (1) the opportunity it offers for growth by creating in them an inquiring mind and providing opportunities to test theories by practice in the schoolroom laboratory; and (2) the advantages teachers possess over psychologists, inasmuch as they work in a more natural situation.

Winch has expressed thus the value and need of research by teachers: "Without the cooperation of teachers there will never be in any appreciable sense a science of education. * * * If teachers stand aside and do not help, they will only have themselves to thank if methods are imposed upon them from the results of experiments which they do not understand or which are not really applicable to their work and in which they have no share."

Types of research work to be undertaken.—The type of research work undertaken should be simple in the beginning, and should not require detailed statistical data. Buckingham, in "Research for Teachers," says, "It is by no means necessary that you set up formal experiments involving control groups in order to serve the cause of education as a research worker."

The following are fairly typical problems adapted to research study: (1) Program arrangement for pupils belonging to different mental groups. (2) Analysis of learning methods of superior pupils. (3) An age-grade study of the classroom, the school, and the county; causes of retardation; remedial measures needed. (4) Classification of pupils based on scientific measurements. (5) Influence of supervised play on discipline. (6) Effect of overcrowded rooms on progress of pupils.

A few necessary cautions.—In initiating, planning, and promoting a research program the supervisor should keep in mind the following: (1) Pupils, teachers, supervisor, and superintendent should have a common understanding of the purposes of research work undertaken. (2) It is better to begin in a small way—to attempt only that which the situation will justify—and work upward until many schoolrooms become active laboratories. (3) In the selection of problems for study the value of the findings should be a determining factor. (4) Those participating should keep an open mind until all data for the solution of the problem are collected. (5) Experiments should be so planned that they will not be carried on at the expense of the children cooperating. (6) Principals and teachers in any school system should be given the findings of all problems in the solution of which they have cooperated.

Knowledge of the local situation necessary.—The administration of even the simplest kind of research program may seem impossible to the supervisor thinking in terms of the total sum of all the odds against it. So it will be, unless she plans a program in keeping with the educational level of the county, knows the educational status of each school, the ability of each principal and teacher to carry to completion projects undertaken, and understands the administrative policies of the county school board. Information along these lines will help her to choose initial steps and to plan the general outline for the program.

Research in Guilford County.—The special type of research program known at first hand by the writer is dependent in part on the use of group-center schools and the assistance of their principals. On these schools the supervisor concentrates efforts to develop research work and holds teachers' meetings at which group-center teachers and those from neighboring one-room schools have an opportunity to study and analyze research problems in process of solution.

Principals give direct assistance, and use results in faculty meetings, in individual conferences, and through contacts with teachers in classrooms. The supervisor, working in close cooperation with principals, holds many conferences with each principal and studies classroom problems with him in his own school. In addition the supervisor conducts a professional study course for the principals' section at the county-wide teachers' meeting held once a month. By means of this course the supervisor reaches classrooms indirectly through the principals and leads them to discuss accomplishments of the various schools they represent, to analyze results, and to make plans for continuing research activities.

Guilford County principals, with the cooperation of teachers, have made an age-grade study of their schools. They have tabulated and

analyzed the causes for retardation, and are now working out remedial measures. In making both mid-term and final promotions, principals utilize teachers' marks, and mental and educational tests. In each school principal and teachers give the tests, tabulate, and interpret results. In the age-grade study and in the promotion programs the supervisor is consulted only when questions arise. When there is any doubt concerning the ability of a principal to conduct the work efficiently the supervisor directs it more closely.

Summary.—The supervisor who plans her program so as to coordinate the efforts of all those working directly in the school system, and who keeps the program within the range of the ability of her coworkers, can successfully promote research work. Even though the work attempted is of the simplest kind it is worth the time and effort put into it, for it will eventually lead into more scientific work. It is in fact only through research work that a basis for the development of rural education can be obtained.

Supervisory Activities and Teacher Reactions

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This report reviews the findings of several recent investigations of supervisory activities and teacher reactions, and summarizes their significant contributions to the problem of the better adjustment of supervision to actual school needs. The investigations included represent widely different sections of the country and different educational conditions. They are thus well adapted to give a picture of present supervisory practice and teacher evaluation.

A study of supervisory activities in Cleveland.—Principal Selma Cook[1] undertook an investigation at the opening of school in the fall of 1922. Forty-three teachers were requested to reply to several questions asked for the purpose of determining their ideas of helpful supervision. Below are given the four questions eliciting the most hearty response from the teachers, followed in each case by a summary of the replies given by 20 per cent or more of the teachers participating.

Question No. 1. List 10 qualities which seem to you desirable in a supervisor, in the order of their importance, naming the most desirable first, and so on.

The qualities named by 20 per cent or more of the teachers were helpfulness, sympathy, executive ability, pleasant manner, tact, expert judgment, and broadmindedness.

[1] Teachers' Ideals of Helpful Supervision, Cook, Journal of Educational Administration and Supervision, December, 1923.

Question No. 2. List five qualities especially objectionable to you in a supervisor.

Only two of the qualities named received one-fifth or more of the votes; of these, domineering received 25 votes; unjust criticism, 9 votes.

Question No. 3. List forms of help that a supervisor can render, in the order of their importance.

All named constructive criticism. The other four forms of help receiving votes of at least 20 per cent of the teachers were teaching model lessons, conferences, teaching by supervisor, and respecting rights of others.

Question No. 4. List an innovation which enables teachers to learn more readily from experience of others.

More than one-half included group teachers' meetings and discussions. Observation of type lessons in various phases of subjects was the only other innovation receiving as many as one-fifth of the votes.

A study made in the University of California.—In Doctor Mead's[1] study, 18 students in a 1923 and 12 in a 1924 elementary education seminar in the University of California cooperated. The 30 students, all of whom were experienced teachers, supervisors, and principals, were asked to formulate and state what they considered as the cardinal duties of a supervisor or elementary principal acting as supervisor.

The various judgments expressed were studied and condensed into six. The six were placed in alphabetical order, and each student was asked to weigh, by scoring one for the item he regarded as most important, two for the next most important, etc. The following, in the order given, represents the judgments of the 30 persons: To inspire and lead; to improve instruction; to improve curricula; to evaluate textbook material; to administer approved mental and educational tests; to strengthen the teaching staff by selecting teachers, rating them, and inspiring them to professional and academic growth.

A study in which certain Indiana and Kansas teachers cooperated.—Doctor Nutt,[2] of Ohio Wesleyan University, in his study attempted in part to discover the attitude of teachers toward "general" supervisors. He asked 231 teachers employed in Hammond and Whitney, Ind., and in Topeka, Kans., to state helpful things which had been done in connection with their teaching by supervisors; to state the things that had been done that had not been helpful; and to state the things they would like to have had done as a help to their teaching. Data obtained as a result of the above

[1] The Supervisor's Job, Mead, Journal of Educational Method, March, 1925.
[2] Attitude of Teachers Toward Supervision, Ohio Educational Research Bulletin, February, 1924.

questions may be thus summarized: Thirty-three items made up the list of helpful things. The four most helpful things (receiving 20 per cent or more of the votes), listed in the order of their frequency, with the percentage of teachers naming each item, were: Encouragement, sympathy, and favorable comments, 48 per cent; helpful and valuable suggestions, 39 per cent; friendly and helpful constructive criticism, 31 per cent; cooperation, 20 per cent.

The teachers replying to "things not helpful" named in all 14 items. More than 50 per cent of the replies referred to technique, such as "making suggestions about the teaching in the midst of the recitation"; "visiting and taking notes but not making comments on the work."

A total of 16 suggestions were made under "helps desirable." "More demonstration teaching" and "more implicit criticisms of lessons taught under supervisor" were the only two items mentioned frequently enough to have much significance attached.

A second California study.—Mr. Valentine,[4] of the San Francisco State Teachers College, compiled a list of 36 specific items representing the major activities of supervisors. These items, derived from conferences with 10 experienced supervisors, were sent to 98 teachers employed in rural, small town, and city schools in five counties in California, with the request: (1) That they mark their approval or disapproval of each item; and (2) that they indicate by ranking the 10 items which, in their opinion, represent the most desirable supervisory activities, assigning first place to the most desirable activity, and so on.

The first 9 items (those standing highest) on the "approved list" correspond with the 9 highest on the "most desirable" list, and are as follows:

1. Hold office hours for teachers seeking help.
2. Give classroom demonstrations when requested.
3. Hold instructional group meeting with new teachers.
4. Plan with new teachers individually.
5. Advise and assist in the collection of collateral materials, visual aids, etc.
6. Help teachers with broad and suggestive recommendations.
7. Hold friendly personal conferences with teacher following visit.
8. Hold frequent instructional conferences with teacher groups.
9. Send out mimeographed lesson helps.

Two North Carolina studies.—In the fall of 1926, 127 Rockingham County rural teachers were asked to list under not more than 5

[4] Job Analysis of Elementary Supervision, Valentine, Journal of Educational Method, March, 1926.

heads the benefits derived from group teachers' meetings. The benefits named were tabulated and classified under 9 heads. Thus arranged, the teachers were asked to rank in order of importance attached to each, giving the most important first place and so on. The final list stands:

1. Give teachers new ideas in teaching.
2. Train demonstration teachers to do teaching of a higher standard.
3. Improve pupils in group spirit, in respect for teachers, in attendance, and in preparation of daily work.
4. Help teachers to solve problems through seeing how others are meeting similar problems.
5. Give teachers a better knowledge of how to deal with pupils in groups.
6. Create enthusiasm for teaching.
7. Enable teachers to compare results of their work with that done by others.
8. Afford opportunity for teachers to make professional contacts.
9. Establish desirable relationships among schools.

The North Carolina State organization of county rural supervisors recently undertook a study which differs in one particular from the foregoing investigations. The North Carolina organization investigated the reactions of supervisors instead of those of teachers. The 27 rural supervisors employed in the State were asked to list the 10 most important supervisory activities. Two hundred and forty statements were received from 24 supervisors. They were mimeographed and distributed to the 27 supervisors, who were asked to select and rank in order of importance the 10 items which best defined supervision. A tabulation of the reports received, with the major items ranked according to the judgment of supervisors, number 1 being assigned to the most frequently mentioned item, and so on, follows:

1. Selecting educational objectives and methods for attaining them.
2. Unifying the work of the school system by setting up standards and directing teachers in the realization of such standards.
3. Assisting school committeemen and county school superintendent in the selection and appointment of teachers.
4. Holding county-wide conferences with teachers.
5. Aiding teachers in solving problems by diagnosing situations and offering remedial measures.
6. Holding individual conferences with teachers, principals, superintendents, and patrons.
7. Training principals in elementary supervision.
8. Recording achievements of the year's work.

9. Stimulating school publicity having for its end: Longer school terms; better trained teachers; better equipment, closer cooperation between parents, teachers, and pupils, and between school and community.
10. Cooperating with all forces for better schools.

Summary.—In summarizing contributions made by the studies considered above, difficulties arise in the determination of consensus standards due to the diversity of terms used in the various investigations. After making due allowance for such diversity, a careful comparison of the findings reported apparently indicates that the major duties of rural-school supervisors, as evaluated by teachers and supervisors, arranged in order of rank, number 1 being assigned to the activity ranked highest the greatest number of times; number 2 to the activity ranked next highest, etc., are: (1) Holding inspirational conferences; (2) teaching and directing in the teaching of demonstration lessons; (3) organizing outlines and teaching helps for teachers; (4) grading and classifying pupils; (5) evaluating textbook materials; (6) improving curricula; and (7) raising the professional and cultural level of teachers.

The findings indicate that teachers prize most the direct services of supervisors who succeed in making them "comfortable in their thinking and feeling"; that they prefer supervisional service which, while it helps them solve classroom problems, is characterized by friendly and tactful attitudes; and that they do not rank highest certain supervisory activities such as experimentation, curriculum studies, and professional improvement of the teaching staff, to which supervisors themselves and educational experts as well attach much significance.

Means Used by Rural Teachers and Supervisors (1) to Profit by the Results of Research and (2) to Participate in Research Studies

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Should a rural supervisors' conference concern itself with educational research? The answer will depend upon the importance attached to research and the interpretation placed upon the supervisor's functions. An analogy from the outside world may prove helpful in establishing the importance of research in promoting educational improvement. All forms of business endeavor that have made conspicuous progress have been built upon an expanding foundation of exact knowledge which is the product of research. Modern life with its conveniences, such as electric lights, quick communication, and rapid transportation, is largely the product of research.

Educational research is scarcely two decades old, yet the information obtained thereby is remaking the schools. Old ideas as to the function of the school, the teacher, and the place of subject matter have been greatly modified by research findings. Future progress of rural education will depend in a large measure upon the degree to which research results are known and used by rural teachers. Since, then, research is of great significance in the improvement of teaching, it is fitting that a rural supervisors' conference should concern itself with research as a potent factor in such improvement.

Profiting by the results of research.—Teaching can not become a science until teachers are trained to apply scientific principles to classroom teaching. Tying up theory with practice by helping teachers adapt psychological ideas to varied classroom conditions is one of the supervisor's chief services. Hundreds of educational investigations have been made and others are in process of completion. They are scattered in educational literature much of which is not available to the average teacher. Until findings are summarized in simplified terms and teachers are shown their application to classroom problems, they can not be expected to use research results. Nor can supervisors find time to do this work to any great extent for teachers. Fortunately several research students and committees have recently summarized several investigations and included in a single volume those relating to one subject. For instance, Gray has summarized the 372 reading investigations made prior to 1925; Buswell and Judd have done the same for arithmetic investigations; and the committees responsible for the third yearbook of the Department of Superintendence, "Research in Constructing the Elementary Curriculum," have rendered a similar service for all the elementary subjects.[8]

To go about the improvement of teaching any subject, the supervisor should acquaint herself and the teachers under her supervision with research findings along the following lines: (1) Subject matter that is most worth while and socially useful; (2) how children learn that type of subject matter most economically and effectively; (3) the best means that have been found for "conditioning its learning."

Utilising research results in the 31 North Carolina counties employing rural supervisors.—(1) A number of counties are using the following criteria as bases for the classification and promotion of elementary-grade children: In each of the first three grades intelligence tests and teachers' judgment are combined; to those factors a reading test is added in the second grade; in the third grade and above, a battery of educational tests is the third factor.

[8] For the convenience of supervisors studying special subjects a list of a few of the best sources of information on research is available on request of the Bureau of Education.

(2) Supervisors make available research results for the subject receiving major attention. For example, in one county in which arithmetic was selected as the subject most in need of improvement, the supervisor summarized arithmetic difficulties and listed types of errors according to frequency. Following this the teachers, with the aid of the Buswell-John diagnostic test, supplemented by original informal tests in common and decimal fractions, tested and observed pupils in order to discover types of problems giving trouble, and types of errors involved. After tabulating and interpreting the findings for the county, remedial measures were undertaken. Scientific investigations were again consulted to discover what procedures had proved most helpful; special remedial suggestions applicable to each disability were collected from current literature, and the list mimeographed and distributed to teachers. Results are evident. Teachers of arithmetic have become more enthusiastic and intelligent, and a few have been able to make unique contributions through the statement of procedures helpful to children in learning certain arithmetical facts and types of performance.

(3) Supervisors introduced newer teaching techniques whose value has been proved. For example, one supervisor has led the teachers to adopt the test-study method in teaching spelling, and has given monthly county-wide tests to check progress made in spelling as compared with that made last year with use of the study-test method.

Participating in research.—Teachers and supervisors should participate in research for the following among other reasons: (1) Conclusions reached in psychological laboratories need to be verified through classroom practice. (2) Many important problems can be solved only through using the classroom as the laboratory. (3) Participation in research tends to vitalize teaching, making teachers more open-minded, and stimulating them to challenge procedure formerly accepted by them without question.

While all teachers should use research results, the more capable ones should be the chief participators in research, as the demands are exacting and the work time consuming. Unless teachers have had technical preparation along research lines they should have close supervisory guidance in controlling important factors if results obtained are to be reliable. As the number of rural teachers who have had such preparation is to date practically negligible, the supervisor must assume responsibility for interesting and assisting superior teachers, either as individuals or as committees, in the solution of local problems. In thus lifting the work of these teachers above the of dull routine, keeping them growing, and leading them to the acquisition of valuable information or materials useful to the entire system, supervisors fulfill an important function.

Rural research programs in North Carolina.—North Carolina rural supervisors have only recently begun to carry on research programs. A number of studies, many of them local in their application, have come to the attention of the writer:

1. Scientific investigation of the value of supervision in the consolidated schools of North Carolina, using a supervised and a control county. (Educational Publication No. 106, Division of Supervision, No. 25, State Department of Education, Raleigh, N. C.)

2. The supervisors of the north central district have collected, preparatory to publishing in bulletin form, examples of "Large Unit" teaching, outlining the steps under the following heads: (1) Situation out of which the activity arose; (2) problem or problems involved; (3) sources of materials and information; (4) types of experiences; (5) outcomes in information, abilities, and attitudes; (6) stimulation to further activity.

3. One supervisor has used an activity program in a group of second-grade rooms, and compared measurable results with those obtained in a control group of second grades.

4. A supervisor is attempting to teach geography in the grammar grades entirely by the problem method, checking results with requirements of the State course of study.

5. The different types of schools in one county are to be compared on a basis of the following factors of school efficiency: Pupil attendance; pupil age; and pupil achievement in reading, arithmetic, spelling and language.

6. A rural teacher is keeping a record of the actual work done by fast, average, and slow groups during the year.

7. Two rural teachers are teaching number work in the first grade "inoidentally," and checking results with requirements of the course of study.

8. Principals of consolidated schools in one county, recorded the actual time given to supervision and administration respectively over two four-week periods.

9. A supervisor is testing out Detroit picture-word material in two first-grade rooms.

10. A county superintendent and a group of teachers are analyzing the arithmetic content in the adopted texts, and eliminating material neither socially useful nor vital to local interests.

Plans for future research work.—No effort has been made heretofore to unify pieces of research work attempted. Two significant preparatory steps in this direction were taken this year: (1) Dividing the State into four sections for the purpose of having supervisors in each section work together on their specific problems; (2) appointment of a research committee by the department of rural

supervisors which is a section of the North Carolina State Teachers' Association.

It is hoped that through the unifying influence of supervisory cooperation secured this year, supplemented by the activities of the research committee, a definite place may be given in our supervisory program to educational research and that next year an extensive piece of research work will be carried on through the cooperative efforts of all the supervisors of the State.

III. The Relation of Rural Curriculum Adaptation to Supervision

Problems Involved in Curriculum Adaptations

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The educational task to-day is far more complex than that of a generation ago. The student mass is much more heterogeneous—all the children of all the people in place of a select group from the more-favored homes. Quick-witted mingle with dull, abstract minded with motor, those whose education began "a hundred years before they were born," with those whose parents are illiterate.

With the increase in range of those to be educated, there has come also an increasing demand that the school serve as a socializing agency. Citizenship is an outstanding aim of education to-day. Social relationships have increased in complexity and scope more rapidly than individuals have advanced in their adjustments, and the schools are called upon to help bridge the gap.

The very center of gravity is changed. Formerly the emphasis was on subject matter, and its mastery the goal; now the needs, interests, abilities, and lacks of the learner are regarded as the center of curriculum organization, and the goal is his growth.

Such differences as these in the demands upon education and the philosophy which guides it, necessarily call for practically complete reconstruction of the curriculum, and this reconstruction is the most prominent forward movement in American public-school education to-day. However, we are far past the time when a single curriculum was thought adequate for all situations, all types of schools, and all children.

Others have already referred to one factor which makes differentiation essential—the differing needs, interests, lacks, and abilities of individual children. Differing standards for pupil promotion have been suggested, i. e., advancing each child who has done his best to another task suited to him. One scheme devised for this purpose is the classification of children into so-called X, Y, and Z ability

groups. This plan has hardly advanced further than administrative organization, curriculum makers as yet having offered little help as to the activities or materials suitable for varying ability groups.

Adaptations in terms of differences in content or in degree of difficulty.—The problem of providing for varying ability groups, while not peculiar to rural schools, is particularly acute in them, due to the number of grades assigned one teacher and the consequent limitation in number of possible groups. The rural school has the problem not only of providing for varying abilities and interests, but of providing for them in the same class.

A second phase of the problem found far more often in rural than in urban schools is retardation, which is frequently the result of deficient educational opportunity rather than of low mentality. A child of good mind may be decidedly over-age for his grade, because school inaccessibility and short terms have seriously limited the amount of schooling available to him. Where such over-age children are found in lower grades, a characteristic problem is that of providing reading material interesting to them, yet within their reading ability.

It is often almost impossible to find textbooks in geography, and especially in history, within the reading ability of rural-school children. Two types of difficulty beset the path of the child in the study of history—ideas beyond his basis in experience and language beyond his reading power. The over-age pupil is perhaps less likely than the younger child to be troubled by the first of these, but the second is often practicably insuperable for him. In many schools where retarded pupils abound it would probably be desirable to provide two sets of textbooks covering approximately the same topics, the one set in much easier language than the other.

Differences in native abilities are not the only ones that necessitate differences in curriculum and in materials of instruction. What the child is and will become is conditioned also by his environment. If there are important lacks in it, the curriculum must supply them. But it must be based, too, upon environmental experiences and interests, even though at the same time widening these experiences to afford a broader base for yet further learnings.

Differences in curriculum will be necessitated whenever there are different lacks to be supplied, different experiences as bases for concepts, different individual or local problems leading to mastery of general subject matter. Where such differences clearly exist, the curriculum, to be of genuine service, must recognize and adapt to them, and, where a range of possible experiences may be expected, must make provision for the utilization of any that may be significant or valuable.

Differentiation in organization necessary.—Short-term schools, the attendance of pupils for only part of the school year, and the large number of one-teacher schools create the need for differentiation in organization. There is, for example, the six-months school. It is manifestly impossible to accomplish in six months what is normally to be done in eight months or nine. Shall the short-term school attempt to afford as much education as the school of standard time? If so, how? It would seem that the only possible solution would be to increase the number of years in the elementary grades, but this provision would be especially hard to make in one and two teacher schools—the types where short terms are usually found—because the number of different grades already cuts the teacher's time to shreds.

If the number of years is not to be lengthened, and the term is to be shorter than the average, something must be eliminated. What? And when? Shall gaps be left all along, or shall there be one long deficiency at the end of the elementary school period? Certainly this much is true: If and where six-months schools exist the teacher should not be expected to use an eight or nine months curriculum. Adaptations must be made for her, not left as just one more thing for her overfull hands to do.

A similar problem, but not identical, is that of the "100-day pupil." By law in some States, whereas the school term is 200 days in length, certain children may be absent 50 per cent of that time, being compelled to attend only the middle 100 days of the school year. These children are associated in classes with regular 200-day pupils. Absence gaps must unavoidably be scattered all through their school life. How is the instruction available during the 100 days of their absence to be made up to them?

It should be noted that different subjects are not susceptible of identical treatment. The curriculum in geography or history, for example, may conceivably be so organized that all the minimal essentials will be allotted to the 100 days of mid year. But how about reading or numbers? The most obvious suggestion here is the use of individual instructional materials and methods. If these are required by the exigencies of the situation, necessary suggestions and directions for their organization and use should be a part of the curriculum afforded the teacher.

An outstanding organization problem is that of the one-teacher school. There is a very general tendency to-day to divide this school into three or four groups rather than eight grades. But a group organization, to be efficient, requires a curriculum made to fit, and also textbooks selected or arranged on the same basis. Integration of subjects, such as geography, history, civics, is another commonly advocated means of more effective organization of instruction in

one-teacher schools. This, however, is a fundamental thing to be worked throughout the whole curriculum, not patched together day by day. Individual instruction assuredly has a place in the one-teacher school, but there is a need for close coordination of group and individual activities if the two together are most economically to utilize the available time.

Causes of waste of pupils' time and suggestions for its prevention.—Attention may be called to the especial importance of avoiding waste of time for all underprivileged children, 100-day pupils, those with 6-months school terms, those economically disadvantaged, and those whose background is deficient because of lacks in the home or environment. Four outstanding causes of time wasting are the inclusion of curriculum material on a basis of tradition only, bad habits of study, neglect of primary grades, and the typical eighth-grade examination.

Curriculum content must be scrutinized and all materials for which genuine needs can not be made to arise in the child's life must be rejected. Guidance as to socially valuable material is afforded by many research studies, such as those of Horn, Jones, Ashbaugh, Ayres, and others in spelling; Rugg's study of map locations; Wilson's study of arithmetic of social value. Much curriculum material is included on a basis of hope. Such, for example, are English grammar in upper grades and Latin in high school as required subjects. Hoped-for outcomes should be checked up on. If the hopes prove vain and the material futile, it should be eliminated.

Bad habits of study, the result of poor seatwork, waste many valuable hours. Children read too slowly because they are finger pointers or lip readers, or they have never had any motive for rapid reading; they compute with all kinds of counting devices because they have had too much time for arithmetic study and no premium placed on efficient ways of reaching the result, provided only it is reached in the end. The 6-months or the 100-day child can not afford to waste precious school moments through defective study methods, nor can the child from the poor home, who will probably have his every moment outside of school claimed for labor at farm work or home chores.

An especially serious source of waste is neglect of the primary grades, particularly the first grade. Retardation in rural first grades is appalling. In many country communities teachers accept it as a matter of course that children will spend two years in the first grade. Besides this absolute loss of a whole year of time to the repeaters, many children who make the grade are handicapped forever thereafter by deficient control of the tool subjects, rooted in the poorly adjusted curriculum or the inadequate instruction of their first year's work.

The eighth-grade examination was instituted for the purpose of enforcing standard elementary education in inadequately taught and supervised schools. The typical eighth-grade examination does no such thing, but rather turns the time of teacher and children away from true education to focus it upon memorizing more or less isolated facts. Until we have much more reliable information than at present of what curriculum is of most worth for rural children any formal imposed requirement like this is a ball and chain to progress. Standard tests can far better serve the purposes sought by eighth-grade examinations, with much less danger of time-wasting cramming.

Progressive adaptation as a cooperative enterprise.—The foregoing is an attempt to sketch the problems involved in curriculum adaptation for rural schools. The task would be enough to appall the most stout hearted if it all had to be done at once or by one person. But improvement may be made gradually, working steadily toward desirable ideals, and it may be the cooperative enterprise of many. A few suggestions for progressive adaptation are here outlined:

1. Cooperative activity of teachers and supervisors over a small or large area, to include: (*a*) Search for educational resources afforded by the activities and experiences potential or already existing in rural communities. (*b*) Collection of lists of problems or projects found to be vital to rural children, which afford valuable approaches to needed subject-matter or experiences. (*c*) Exchange between schools of successful curriculum units based on the foregoing. (*d*) Cooperative development or selection of individual practice materials related to group activities or to large problems or projects.

2. Assistance from research: Examples of this have already been given. Doctor Collings, in the course of his experiment with a project curriculum, rendered absolutely essential service to the teacher of his experimental school by compiling and organizing in a form ready to use as needed, the information required in carrying out various purposes as they arose in the pupils' lives. The Bureau of Curriculum Research of Teachers College is engaged in the compilation of all that has been done and written in the field of the elementary curriculum, and this enormous mass of sifted and digested material should be of incalculable value to future curriculum makers.

3. State courses of study: The State must undertake responsibility for the rural school curriculum, providing for all its existing types of schools curricula at least as well adapted to their needs as our present urban curricula are to typical city schools.

4. State curriculum advisory bureau: It is highly desirable that in each State department there should be a bureau, with a specially

qualified head, to advise "on call" concerning all school situations in the State that may be undertaking curriculum reconstruction, and to coordinate the efforts and products of all, for the good of all.

The rural curriculum is not an impossible accomplishment. It can be made, it must be made, but its making calls for scientific study and constructive organizing ability of high order, and for time expenditure in proportion to the importance of the task.

Differentiation in Curricula to Meet the Life and Needs of Rural Children

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It is the purpose of this paper to attempt to formulate a partial answer to the question, "In what ways and to what degree should elementary-school curricula vary significantly as between rural and urban regions?"

Objectives of rural and urban elementary education are the same.—Dr. David Snedden, of Teachers College, points out that, "In general there are no good sociological reasons for differentiating school curricula by regions. The slogan, 'Adapt education to the local community,' may be significant so far as promoting concrete and realistic methods of teaching is concerned; but it is largely buncombe so far as objectives are concerned. * * * The purposes of teaching spelling, the carpenter's trade, long division, the history of the American Revolution, the hygiene of tuberculosis, current events, safety on highways, and the like, are about the same everywhere." With this point of view we can heartily agree. Certainly there is not yet any definite indication that general educational objectives for country boys and girls should differ from those for city children.

Variations in approach, emphasis, and content necessary.—Granted that general objectives remain the same, it should be kept in mind that the rural environment itself demands a different method of approach, a different emphasis on certain phases of subject matter, and in many cases a different selection of subject matter, in order to reach these common objectives for rural children which we at present agree should be the same for all within the limit of the individual's ability and capacity.

Approach.—The need of different methods of approach in the presentation of arithmetic is apparent from a consideration of the arithmetical background of rural and urban children entering school for the first time. A rural supervisor who was coaching a group of city children remarked: "The only arithmetical experience these

pupils seem to have had is in making change." This experience apparently forms the chief arithmetical background of many city children. It is an experience, however, which rural children are not likely to have had to any extent. The rural boy or girl will have developed number concepts from counting baby chicks, turkeys, and ducks; from helping mother gather the eggs and counting the number found; from filling a quart pail with berries; from seeing the bucketful of milk father carries in from the barn and hearing him say, "Old Bess gave a gallon and a half to-day." The city teacher should begin with change and work outward toward the country child's quart of berries, while the country teacher should do just the opposite. The latter's task is the more difficult, because there is so little available teaching material designed to help her approach the rural child from his end of the line.

Emphasis.—The emphasis should in many cases be placed on different units of the subject matter taught urban and rural children. This may be seen in two illustrations from the teaching of hygiene: (1) In instruction having at its end disease prevention, Doctor Snedden says: "It is obvious that the hygiene of malaria and hookworm prevention needs more emphasis in rural areas of Alabama and certain other sections of the South and need be touched lightly if at all in Montana. * * * The hygiene of sunshine may need far less emphasis on behalf of rural than on behalf of crowded urban residents." (2) Both urban and rural teachers should give instruction in nutrition which may well center around the school lunch with both groups of children. But in the city the teacher is either aided or hindered by the school cafeteria and must help pupils to choose wisely from the menu offered the food for their noonday meals. In the small country school the emphasis is necessarily placed on the preparation by teacher and pupils of one or more hot dishes at school to supplement lunches brought from homes. In doing this the teacher is obliged to use chiefly products of the farm rather than of the store, and at the same time to provide an opportunity for all children to eat a well-balanced nutritious noonday meal in the schoolroom. To accomplish these ends without consuming too much time in connection with the process demands a far different emphasis than that demanded of the city teacher.

In the courses in civics rural teachers should give considerable emphasis to the topic of cooperation. This is not necessary in cities where legislation does for the residents what country people must learn to do for themselves. Seven or eight hundred persons may live together in a city apartment house, and for the most part all cooperate, but it is a cooperation which authorities have worked out for them and to which they merely conform. Cooperation in the country is quite another matter. Here it must be voluntary coopera-

tion for mutual helpfulness in a common purpose. Originally this is the way cooperation grew and became fixed in the city. To-day, however, the daily life of the city people makes them cooperate even in spite of themselves; whereas, in the country, people still need not cooperate to the same degree in order to live, and will not cooperate to the extent to which they should for their own advantage unless positively taught to do so in the school and community.

Content.—Hygiene courses serve to show the need of differentiation in content. The objective is the same for city and rural children—healthful, normal living—but the actual content of the rural curriculum must include instruction in a different type of sanitary practice from that needed in the town with its sewerage system, water plant, and inspected milk. It must include the care of cold and wet feet, a problem which figures but little in the city school to-day, but which still figures large in the country, where many children go to school poorly protected from the weather, walking the whole distance to school, or trudging through the snow to catch a school bus, and then riding several miles through the biting air. An incident illustrating this point is that of a group of sixth and seventh grade pupils in a country school who were asked to name their favorite teacher and give three reasons for liking her. Out of 75 replies 70 gave as one reason: "Because she would let us warm."

Instruction in "safety first" is rightly attracting much attention in elementary education. Courses so far compiled deal largely with such topics as municipal traffic laws, the danger of automobiles, obedience to traffic cops, and the hazards of jaywalking. Rural children undoubtedly need such information for protection on their occasional visits to town, but they need much more a totally different course of study for daily living. This should include such topics as picking up nails and tacks, protection from farm animals and farm machinery, fire hazards accompanying the use of kerosene oil or acetylene gas, and the like. In view of the fact that careful estimates indicate that there are approximately 4,000 agricultural fatalities and more than 80,000 major and minor accidents among farm people each year that could be largely prevented by the practice of "safety first," there is real need of a content meeting the rural child's needs in this field.

The selection of suitable topics from the traditional courses offered rural children in agriculture demands further study. Remembering that the school is relieved of the obligation of supplying children with educational experiences similar to those which they meet in their home environment, the question arises as to whether or not agriculture should be taught in the rural elementary school. If so, what type of agricultural teaching is needed by a rural elementary child who is daily living the life of the agricultural group? In the

opinion of the writer the agriculture taught should be cultural agriculture, and this type of work might well be offered also to city children. Doctor Brim has well said: "We do not wish to ruralize the rural school, we must psychologize it; we do not wish to vocationalize the rural school, we must socialize it." If this be so, then cultural agriculture should be the kind of subject matter offered in this field in rural schools and not practical agriculture. It will be the type of agriculture whose aims include, among others, developing in every child a love and appreciation of his environment and a life-long interest in beauty of landscape and in the indomitable spirit generally characteristic of country people.

Summary.—Rural teachers should have abundant materials for their use in differentiating the curricula taught by them. Those materials, written from the rural point of view, should have for their purpose the complete socialization of the rural school if rural children are to be effectively taught and their life needs met. The rural child needs to get the city point of view, and the urban child the rural point of view. The city child starts his study of milk with the bottle on his doorstep; in the country the child must start with the cow; but each study must reach the other before the act of teaching is complete. Instructional materials should help pupils acquire a knowledge and understanding of city and of rural points of view.

To date, textbooks and courses of study are largely urbanized. A few notable exceptions are beginning to appear. Considerable curriculum adaptation is necessary before rural teachers will receive adequate help in adapting their instruction to the point of view of rural children.

Adjustment of the Curriculum to the Hundred-Day Pupil

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In Dorchester County, on the eastern shore of Maryland, fathers, mothers, and children work at truck farming and in canneries. Children do much of this work, as the men are engaged in oyster fishing and the women in shirt factories during several months of the year.

In consequence of this industrial situation, 12½ per cent of the 3,268 white elementary pupils in the county did not attend school 100 days out of the 183-day school year during 1925–26. Many others attended only 100 days, as the compulsory school law permits legally employed children from 13 to 16 to limit their school attendance to 100 days "as nearly consecutive as possible, beginning not later than November 1."

The largest number of these pupils, who enter some time in November and leave in April, are found in the sixth and seventh grades;

although some have not completed the fourth grade. This brief period of attendance, as a comparison of the pupils' ages and grades shows, has led to bad over-age conditions, as might be expected, and has increased the difficulty of the curricular problem for teachers.

The following account of an effort to check the over-age problem (1) by helping teachers cover a definite amount of the course of study with the 100-day pupils, and directing them to promote these pupils upon their reaching the desired goals; and (2) by helping pupils use their brief school year to good purpose and thus to enjoy it, may be suggestive to supervisors elsewhere confronted with similar problems.

Remedies.—The remedies used for the situation described were grouping, division of subject matter into units, supervised and directed study, and flexible gradation of pupils.

(1) *Grouping.*—Throughout the county grouping has been found helpful in all schools. With the exception of three buildings, each room in the graded schools contains two grades; one and two teacher schools contain several grades to a room. The grouping program in all except the three largest schools combines fourth and fifth grades in history, spelling, and reading; sixth and seventh grades in history, geography, English, reading, and spelling.

(2) *Division of subject matter into units.*—The supervisor assumed much of the work of rearranging the topics of the subject matter to be covered, omitting some topics, and in a few instances making additions to the content of the adopted texts. The year's work was divided into four units, each requiring an equal period of time for its completion, with the understanding that the 100-day pupil should be held responsible for units 2 and 3. Geography in the fourth year is divided as follows: Unit 1, food, shelter, and clothing; unit 2, land, water, and air forms, with emphasis on their effect upon food, shelter, and clothing; unit 3, agriculture, commerce, and government, with emphasis on their development in consequence of man's quest for food, shelter, and clothing; unit 4, introduction to general geographical facts, as size, shape, and rotation of the earth, location of oceans, and the like.

The 100-day pupil, in his study of units 2 and 3, learns some of the essentials taught under unit 1 during his absence. His knowledge of this unit necessarily remains incomplete.

Fifth-grade geography.—In outlining the four units for the fifth grade the continents are studied in the following order, with emphasis each time upon the facts taught in unit 4 of the fourth grade: Europe; North America and its countries; South America; Asia, Africa, and Australia.

Sixth and seventh grade geography.—The sixth and seventh grades are combined in geography, and the work alternated by years.

During 1926–27 these grades covered, in unit 1, physical geography facts, as wind and ocean currents, latitude and longitude, combined with special study of South America. In unit 2, Europe, stressing the physical geography facts learned in unit 1, and Africa and Australia studied in their relations to Europe, especially the British Isles. In unit 3, Asia and the United States, in comparison with continents studied. In unit 4, Africa, Australia, and the islands of the sea.

In 1927–28 the work of the sixth and seventh grades group will be divided as follows: Unit 1, plant and animal life of North America; unit 2, United States; unit 3, Maryland geography, and countries north of the United States; unit 4, countries south of the United States, and South America.

The stress for the 100-day pupil is laid on the United States. It is studied in both the sixth and seventh years' work, and emphasis is given to the commercial relations existing between the United States and other countries, in order to give pupils an appreciation of the interdependence of nations and to review the industries and resources of other countries.

It will be noticed that the 100-day pupil in Dorchester County, although attending school during only the second and third quarters of each year, has an opportunity to cover all the geography work offered in grades 4 to 7, as the geography course is so planned as to offer in units 2 and 3 in any one year a review of the work done in units 1 and 4 during the preceding year. It is true, of course, that the subject matter covered during the terms in which the 100-day pupil is absent is not likely to be as fully comprehended by him as it is by the other pupils. This we should expect. We desire these pupils and their parents to understand definitely that we arrange to have them finish certain units of work, but we do not attempt to give them more than one-half the amount of education received by children who attend twice as many days each year.

The teaching of history.—The subject matter of history is divided similarly to that of geography. The fourth and fifth grades form one group, the sixth and seventh a second group. Work alternates by years. During 1926–27 the following outline is in use: The work in the fourth and fifth grades is treated biographically: Unit 1, discoverers and explorers preceding the nineteenth century. Unit 2, colonizers. Unit 3, Revolutionary heroes and early leaders of the United States. Unit 4, the story of Maryland and of Dorchester County. During 1927–28 the work to be covered includes: Unit 1, discoverers and explorers of the Central and Western States; inventors of the early United States. Unit 2, Civil War and reconstruction leaders. Unit 3, later inventors and heroes of peace. Unit

4, a continuation of the study of inventors and others who have furthered national progress.

History in the sixth and seventh grades group.—During 1926–27 this group was studying European background; English history to the colonization of America; early United States history; and the Revolutionary period. During 1927–28 the work to be covered is as follows: (1) Formation of the United States, rise of West and of political parties; (2) the slavery question and reconstruction period; (3) influence of transportation and communication upon development of the Nation, territorial expansion, important national issues; (4) Maryland history and civics.

Promotions in history and geography.—We aim to promote the 100-day pupil each year in history and geography. Our goals in these subjects are not so complete as are the goals in English and arithmetic. Thus we can promote the short-term pupil on the basis of standards set up for him. Where his reading ability is below standard, the texts are supplemented by easier reading material, usually the text of the next lower grade.

English and arithmetic courses offered 100-day pupils.—As we have state-wide goals in arithmetic and English which include only the essentials in these subjects, promotion in them necessitates reaching the same standards of attainment met by pupils attending full time. Thus, while a pupil may be enrolled in grade 6 in geography, history, and other subjects, he may be working with grade 5 in arithmetic and grade 4 in English, as a result of tests given him in arithmetic and English. Spelling is taken care of as one of the goals in English. Individual, and where possible, group drill is given on words commonly misspelled in written work.

(3) *Supervised study.*—In attempting to give 100-day pupils as much as possible in the short period during which they attend school, the teacher's most important function is to improve the quality and effectiveness of study periods through supervision and direction. The use of the group schedule allows more time for this work. Supervised study is of two types: The recitation period type and the individual or special help group type. In the first type the teacher develops new work with the class. Individual needs and abilities are recognized by making minimum, average, and maximum assignments. The minimum assignment takes care of the 100-day pupil, although if he has the ability he may work on the average, or even the maximum, assignment.

For the second type of supervised study a regular special-help period is provided on the daily schedule. The whole period may be given to removing special difficulties met by pupils in connection with the study of any subject. The same difficulties may be common to several pupils; on the other hand, each pupil may have his own

special difficulties. If difficulties are common to more than one, a special-group teaching period results. Reading difficulties enter so largely into those met in school subjects generally that a portion of each group supervised-study period is generally devoted to helping pupils acquire skill in reading comprehension. The teacher may require a pupil, after reading silently one or several paragraphs, to tell the rest of the class what he has read; or she may ask a definite question which demands that pupils read until they know the answer; or she may prepare a skeleton outline and ask pupils to fill it in after reading a certain assignment.

In addition to meeting group difficulties, the teacher finds it necessary to help individual pupils with specific difficulties, due often to absence at the time a certain unit of work was taught. Sometimes, especially in English and arithmetic, 100-day pupils are given individual assignment sheets for practice useful in acquisition of skill or for aid in making up lost work.

(4) *Flexible gradation of pupils.*—Hundred-day pupils are graded only on the units of work they have completed. This type of gradation offers another opportunity to keep before parents, as well as pupils themselves, the fact that they have done only a portion of the work accomplished by pupils who attend full time.

Summary and results.—The determination not to neglect the 100-day pupil or allow him to pass his time in school as he pleases led to the use of the program herein described in which, by means of grouping, division of subject matter into units, supervised study, and flexible gradation, special attention is paid to the needs of these pupils. Three gratifying results have followed: (1) The 100-day pupils entered school more promptly November 1, 1926, than at any time in the past; (2) they are manifesting more interest in and willingness to do their classroom work; (3) a few parents have expressed pleasure in that their children have done definite amounts of work and have received credit. These parents, moreover, stated that, if possible, they intended either keeping the children in school for at least one extra unit this spring, or permitting them to start earlier next fall.

Adjustment of the Curriculum to Atypical Pupils

MARGARET HAYES

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All children depart more or less from the average, and the amount of curriculum adaptation needed for their interest is in direct proportion to the amount of such departure. In attempting to adjust the curriculum to atypical pupils the first problem is to find out as accurately as possible the amount of departure, and to place pupils

in groups as nearly homogeneous as possible for teaching purposes. Basically the problem is one of proper classification.

Psychological principles guide in planning.—Among the psychological principles kept in mind in planning the work in Craven County are the following: (1) Pupils work better when grouped with other pupils on a mental level similar to their own; (2) motivation is especially necessary with dull children; (3) every pupil is entitled to some degree of success; (4) the child, as a growing organism, needs development in other fields besides the academic; (5) an inferiority complex is a hindrance to learning.

Use of intelligence tests.—By use of intelligence tests, intelligence quotients of all pupils in the county were obtained. The pupils were classified by use of the following schedule: Those rating from 90 to 110 were ranked as average; those rating from 110 to 140, superior; those rating above 140, near-genius or genius. At the other end of the scale pupils rating from 80 to 90 were classified as dull; those from 70 to 80, border line cases; those below 70, definitely feeble-minded.

Program planned in accordance with test findings.—In planning the details of the program each teacher, with the assistance of the supervisor, classified the pupils in her room into three groups: Average, above average, and below average. The teacher was instructed to administer the regular courses of study with the average group; to give extra work to the above-average group; and to give extra help to the below-average group ranging between 70 and 90. As we agree with students of normal psychology that those with an I. Q. below 70 should receive institutional care, no plans were made for their educational advancement in connection with the regular county school system.

In two schools attendance permitted the employment of an extra teacher. In each of these schools a teacher was placed in charge of the pupils from the third to seventh grade with I. Q.'s between 70 and 90. She taught these pupils from 10.30 a. m. to the close of school, concentrating on fundamentals in reading and arithmetic, but striving always to find each pupil's particular needs. Pupils were given constant individual attention.

Curriculum adjustment successful from the start.—The success of the work has been in part due to the initial creation of a right attitude on the part of parents, to whom the establishment of a special room was presented in the light of an opportunity for children attending. Pupils assigned to this special room gave so good a report of the work that in many instances other pupils asked to be allowed to go to the room for special help. Regular grade teachers from whose rooms the slow pupils were eliminated were able to do more

for the pupils left under their care, and were held to a higher standard of achievement with them.

Plans for the future.—We feel that we have made only a beginning. Although trained, conscientious teachers were selected for the two special rooms, they were without special preparation in abnormal psychology. Two teachers at the present time are taking special courses along this line in order to be available in carrying out plans to extend the work in the other schools. As the scope of the work is thus enlarged we hope to be able to collect data relating to the type of curriculum best suited to below-average pupils, for purposes of comparisons.

Summary.—Adequate curriculum adjustment includes making special provision for atypical pupils. By using intelligence tests, and by planning subsequent grouping and curriculum in accordance with test findings, much may be accomplished. A differentiated curriculum well adapted to the needs of atypical pupils in rural schools must await results of studies carried on by well-prepared teachers thoroughly familiar with the psychology of abnormal children.

Adjustment of the Curriculum to the Short-Term Rural School

By MATILDA O. MICHAELS

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In 1920, at the time of the employment of the first supervisor in Durham County, 68 per cent of the rural schools had a term of six and seven months; the remaining 32 per cent had eight-month terms. The majority were two-teacher schools, attempting both elementary and high-school work. The largest rural school was a four-teacher elementary school.

Among problems arising from these conditions, the following related to curriculum adjustment: What measures should be employed (1) to enable the short-term schools to compare better in quantity of work with the long-term schools? (2) To reduce the number of daily recitations in order to accomplish more effective work?

Efforts to counteract injurious effects of short-term schools on quantity of work.—Realizing that they could not in justice be expected to accomplish as much in six months as their fellow teachers in eight-month schools accomplished, teachers in short-term schools had long been in the habit of relaxing effort, and of using the short school year as an excuse for failure to reach standards consistent with the length of the school term.

The supervisor determined to enlist the cooperation of teachers in such schools in putting forth special efforts to adjust the curriculum to the limited school period, and to realize more fully on the possibilities of the short school year. A circular letter containing an out-

line of the portion of the course of study which schools might be expected to cover each quarter of the short school year was sent to teachers, with the request that at the end of the first month they send the supervisor a progress report, giving names of textbooks used, amount of work accomplished by the various classes, and a brief statement of methods used. At mid-term and at the close of the term the supervisor checked the amount of progress with each teacher, and gave promotion cards to pupils stating whether half, three-fourths or some other fractional part of an eight-month school year curriculum assignment had been finished by them.

This stimulated teachers to do their best, and enabled teachers and parents to compare the amount of work done in short-term schools with that accomplished in long-term schools, thus creating an interest in the advantages of a longer school year.

Efforts to offset the effect of short-term schools on quality of work.—In order that the quantitative side might not be overemphasized, the supervisor began, through reclassification, to attack the qualitative side: (1) In making class rolls for teachers before the beginning of the school year, possible combinations of classes were suggested as an aid along this line; (2) on the occasion of supervisory visits, the supervisor taught as many recitations as possible for the purpose of learning from personal observation what classes could be advantageously combined; (3) a testing program in reading and arithmetic was launched. Test results, combined with teachers' estimates, were used as a basis for further combinations and promotions. Regrouping having been found feasible, teachers entered more and more into the spirit of this phase of the supervisory program and gave valuable suggestions in the solution of the regrouping problem. By the end of the third year the schools of the county were working well under the reclassification thus effected.

Typical instances of regrouping.—(1) *Primary grade.*—In a primary room of a two-teacher school containing 30 pupils, the supervisor found (*a*) a third grade made up in part of pupils repeating work; (*b*) a second grade similarly constituted; (*c*) a first grade containing only repeaters, and (*d*) a beginners' class. All pupils, including those in the third grade, were poor readers; so graded reading books were discarded, and all pupils were at first given books of primer difficulty to read. The room was finally organized into three reading groups, two groups in spelling, two groups in English (at times only one), one in writing, one in music, and one free period in industrial arts. The pupils were slipped forward or backward in the various groups as their individual needs required.

An interesting Indian project was worked out in this room, near the close of the school term. One group read the Hiawatha primer,

a second group found all the Indian stories contained in easy readers and told them to pupils in the lowest group, and the best readers read stories from "Around the Light-Wood Fire." While pupils of the lowest group worked with the teacher on the basal reading book, other groups were busy with occupational work connected with the project. The girls in one corner of the room worked on costumes for an Indian play. One group of boys constructed wigwams; another, an Indian movie. The language work centered around the movie, the dramatization of Hiawatha, and the reproduction of stories read by the various groups. Opportunity for teaching arithmetic to the lowest group was found in counting feathers, beads, and the like; and in connection with many measurement problems for the higher groups.

As a result of work of this type social, self-reliant groups of pupils were developed. At the end of the year the members of each group were promoted to the work of the next higher group.

(2) *Grammar grade.*—In a grammar grade in a two-teacher school where pupils were poorly grouped and the teacher complained that they could not read basal texts, the supervisor concentrated her efforts largely on improving the teaching of reading. She directed the teacher to test pupils with the Thorndike-McCall reading test; to divide them into three groups according to their reading ability; to discard all reading books in use; and to use easy supplementary readers, obtainable from the county superintendent's office.

The tests showed that each group was composed of pupils varying widely in reading ability. They were organized into three homogeneous groups, and the same easy book was at first used by all three groups so that pupils could be slipped back and forth among groups as the teacher found advisable. By the end of the first week this book was taken away from the lowest group and an easier one substituted. Throughout the year this group read very simple books, while the other groups used slightly more difficult reading material of a continuous-story type, including geography and history readers to supplement the textbooks in these subjects.

Among remedial suggestions which the supervisor gave the teacher were the following: (1) Help pupils to add new words to their vocabulary through use of the context as well as through use of the dictionary. See that each class learns at least three new words a day. (2) Teach syllabication to give pupils power to attack new words. Study prefixes, suffixes, and stems of words. Have a period separate from reading recitation for this word study, and one in the fourth grade for special work in phonics. (3) Use phrase flashing for increasing eye span and for decreasing lip movement. (4) Have much silent reading done under time limitations. (5) Have

pupils read to find one important question answered in the paragraph or on the page. (6) Use dramatization.

Among improvements noticed on a visit to the school near the end of the school year were: A different attitude among pupils, signifying enjoyment of their work; decrease in vocalization; eagerness to improve their reading efficiency; more vital class work in all branches; and keen interest in preparation of a dramatization which was providing excellent training in English for two higher groups, and was utilizing members of the lowest group for minor characters. Pupils in this school, when tested at the end of the year, showed remarkable improvement. They have since, through consolidation, passed into one of the larger schools of the county and are keeping pace with other pupils in the school.

Summary.—Better adjustment of the curriculum to the short-term rural schools has had these among other results: (1) Work in these schools grew to be of a higher type due to (*a*) establishing definite standards of accomplishment and recording progress made in reaching them; (*b*) combination of classes and provision for alternation of work by years; (*c*) use of standardized tests to discover the level attained at the end of successive periods of time; (*d*) planning of remedial measures to raise such levels.

(2) Increased efficiency of the short-term schools stimulated the longer-term small schools to greater efforts. As a consequence the consolidated schools, which are taking the place of the small schools, find that pupils entering them from the latter are well prepared to do the work expected of them.

(3) Increased interest in the need of a longer school year, which arose from a growing realization on the part of patrons that pupils under the most favorable circumstances could do only a portion of a year's work in a short-term school, has culminated in the elimination of all six-month schools in Durham County. The voters have provided, through a special tax levy, for an eight-month school in each case in which consolidation has not solved the problem. At the present time all children of the county are in eight-month schools.

IV. Equitable Distribution of the Supervisor's Time

Questionnaire Study of Allotment of Time of State and County Supervisors in Southeastern States

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This study of time distribution is based on reports received in response to questionnaires from the United States Bureau of Education, sent out for the purpose of carrying out recommendations of the committee appointed in accordance with resolutions adopted at the Nashville supervisory conference.

The supervisors cooperating were requested to account for the way in which they distributed the time devoted to professional duties among activities named. They were asked to keep a detailed record of their time, counting six days to the week and four weeks to the month, and to fill in the questionnaire forms sent them, one for each of the following eight months: April, May, June, July, August, September, October, and November.

One hundred reports were received from county supervisors in seven States—Alabama, Florida, Louisiana, North Carolina, Tennessee, Virginia, and West Virginia. Nine of these reports were not used because of incomplete information. The 18 which were filled out for the summer months are tabulated separately.

Table 1, based on the remaining 73 reports, summarizes the percentages of time devoted to each of several duties by supervisors reporting.

TABLE 1.—*Percentage of time devoted to different duties*

Supervisory activity	Percentage distribution of time		
	Highest	Lowest	Median
Visiting schools	75	3½	4
Traveling	66	1	1
Teachers' meetings	28	0	1
Community activities	25	0	1
Office and clerical work	85	0	2
Other work	50	1	1

Summaries given in Table 2 are based on 18 reports for the summer months, June, July, and August.

TABLE 2.—*Percentage of time devoted to different duties in summer months*

Supervisory activity	Percentage distribution of time		
	Highest	Lowest	Median
Visiting schools	40	0	20
Traveling	20	0	0½
Teachers' meetings	60	0	11
Community activities	3	0	0
Office and clerical work	100	14	50
Other work	100	5	77

A comparison of Tables 1 and 2 reveals considerable variation in distribution of the supervisors' time, as between the regular school year and the summer months. The diminution in the percentage of time spent in community work, in school visitation, and in traveling during June, July, and August may be readily understood. The increase in the relative proportion of time given to office and clerical work during the summer may indicate that careful preparation is made during these months for the work of the next year based on a careful study of records of accomplishment for the year just ended. If thus spent, time given to office work may prove a source of professional stimulation and provide a basis for judging the past year's work. On the other hand, if office work is of the routine type which could easily be delegated to those lacking professional training, it has little, if any, value for supervisors.

Assisting in teachers' meetings occupies a greater percentage of time in Table 2 than in Table 1, due doubtless to the survival of the custom of holding teachers' meetings of several days' duration during the vacation months. This practice no longer has the general sanction of administrative and supervisory officers conversant with types of in-service preparation of teachers yielding highest returns. The large percentage of time given to "other work" in the summer is explainable by the fact that two items appearing most often in the replies under this caption are "attendance at summer schools" and "study of professional books." Time thus spent by supervisors, if in definite preparation for their next year's work, should yield large returns.

A comparison of the results of the study tabulated in Table 1 with those of two similar studies reported in United States Bureau of Education Bulletin, 1926, No. 12, is of interest. The high correlation between the percentage of time devoted to each of several activities in the present study and the percentage devoted in each case to similar activities reported in the bulletin would seem to indicate

considerable agreement among supervisors as to how time should be apportioned.

Studies of this kind suggest to the relatively few supervisors giving high percentages of time during school months to "office and clerical work" and to "other work," the necessity of a more careful limitation of their time to supervision of instruction as interpreted from the modern point of view. Such studies doubtless have a standardizing effect, and lead supervisors to attempt to square individual practice with that of the majority of their colleagues. Consensual standards are admittedly a safer guide to follow than are individual standards.

In this connection, however, it is well to recall a statement made by Dr. S. A. Courtis in a recent magazine article. He refers to the percentages in a certain well-known study of time allotment of elementary principals, and suggests that, without a basis of judgment, percentages of time given to different activities denote neither good nor bad practice. Doctor Courtis believes that a true basis of judgment must rest upon objective evidence derived from scientific experimentation, and that while measurement is relatively easy, evaluation is much more difficult.

If this be true, it is obvious that before one can judge whether or not an increase of the relative amount of time devoted to any one supervisory activity will increase the efficiency of supervision, studies will have to be carried on, having for their purpose evaluation of the different kinds of supervisory services.

Difficult and long delayed in accomplishment as it may necessarily be, an essential next step in supervision is to evaluate the different supervisory activities in terms of the contribution each activity renders to supervisory efficiency. The sooner it is possible for supervisory officers to provide for experimental trial of varying amounts of time allotted to the different supervisory activities, the sooner they can hope to modify customary time allotments with some assurance that they are thus making supervision function to a greater degree.