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ABSTRACT

Describing major features of the New York Catskill Area Project in Small School Design (CAPSSD) begun in 1957, this pamphlet addresses: (1) Basic Concepts in Small School Design (flexible scheduling, multiple classes, organizational interdependency, teacher versatility, student planning, technological communications, and interagency cooperation); (2) CAPSSD Background (emphasis on the human relations aspect of cooperative development, an interrelated community-school atmosphere, and shared services); (3) CAPSSD Correspondence Courses (emphasis on reduction of schedule conflicts, academic curriculum enrichment, and extended vocational services via supervised correspondence courses serving multiple classes, educational acceleration and exploration, transfer students, repeaters, alternate year courses, and college preparation); (4) CAPSSD Multiple Classes (describes the way in which different subjects taught at different levels in the same room promote student responsibility, cooperation, better student-teacher relationships, maximum use of ability): (5) CAPSSD School Aides (use of aides to conduct teacher housekeeping duties, freeing the teacher to teach); (6) Enrichment Opportunities for Teachers and Students (college courses, summer workshops, study groups, inter-school cooperation); (7) Organization of Small Schools for Coordinated Improvement (federation vs centralization, freedom vs control, cooperating institutions, etc.). (JC)

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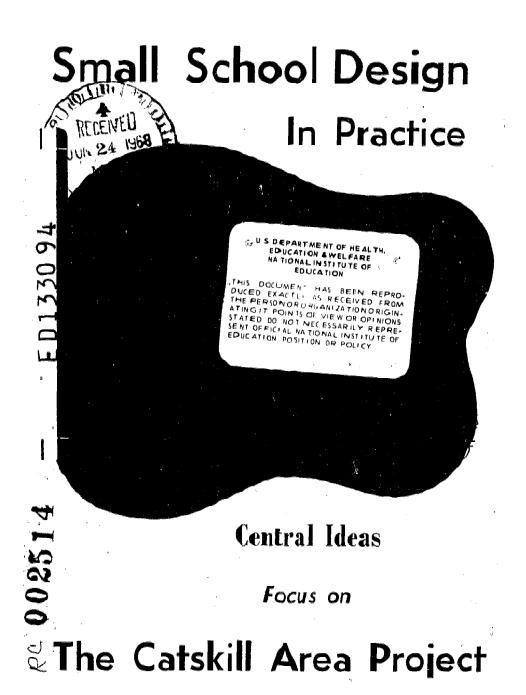
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Small School Design

In Practice

Central Ideas

Fogus on

The Catskill Area Project

[1961]

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SMALL SCHOOL DESIGN IN PRACTICE

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Foreword

This pamphlet has been planned to point up the fundamental principles of small school design and to show how these principles are put into operation in the school and classroom.

Mutual interest in improving education in the small school led to joint action of the Central School Sjudy and Catskill Study Council, and to the establishment of the Catskill Area Project in Small School Design in 1957. During its Ninth Annual Summer Work Conference, Central School Study arranged to cooperate in diffusing the findings of the Project among the central schools of the State. Diffusion activities so far have included twelve Area Meetings on the subject, trips by school people and board members to the Catskill Area to see Project ideas in practice, four feature articles in CENTRAL IDEAS, Central School Study's periodical, and finally, this publication, of which pages 13-43 are reprints of the feature articles.

Credit is due the late Willard L. Tremlett for preparation of the major portions of this publication. Ernest Auerbacher, Evelyn Hodgdon, and Jean H. Dreyfus assisted Mr. Tremlett with the articles on Correspondence Courses, Multiple Classes, and School Aides. Charles Wright also cooperated in the collecting and preparation of material. All contributors have worked under the general direction of Professor Frank W. Cyr of Teachers College, Executive Secretary of the Catskill Area Project. And recognition is hereby accorded James L. Sampson of the State College of Education at Oneonta for his work as Coordinator of Project activities.

Austin D. Swanson Executive Secretary Central School Study

Basic Concepts In Small School Design



Delaware Academy and Central School at Delhi, New York—one of the large Catskill Area Project Schools.

There are some fundamental differences between small and large schools. The train-automobile analogy is helpful in illustrating this fact. For example:

- A train serves large groups of people, an automobile small groups. Frain passengers have no responsibility for the running of the train; they merely "go along for the ride." Passengers in automobiles, on the other hand, may drive, read the road map, help make decisions as to route and timetable, and participate generally in the operation of the car.
- The train is a segmented, specialized organization while the automobile is a generalized unit. Each car on the train—locomotive, day car, sleeper, diner—has a particular function. Each operates

.

independently of the other in the performance of this function; the automobile operates with all parts closely coordinated.

• The train is self sufficient on a long trip. Food can be served, sleeping facilities are available, fuel supply is adequate for all or large portions of very long runs. The automobile must make frequent stops at service stations and garages, at motels and restaurants, to take advantage of services provided by others.

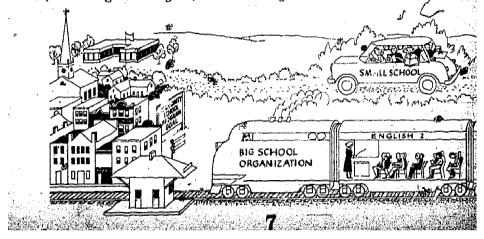
A Small School is Different

The large school, like the train, can be organized to serve large groups. The big comprehensive high school in the United States provides a wide variety of offerings in its curriculum. This enables each student considerable choice and a better chance to pursue subjects suited to his interests and abilities. This comprehensive organization is often pointed to as the greatest accomplishment of American secondary education.

The small school's offering has traditionally suffered from lack of variety. For example, in a large school there are enough students to justify courses in say, creative writing, college preparatory English, non-Regents English, and

business English. But what of the school that has only twenty students altogether in a given grade? A few of them might like to take each of the courses just mentioned but usually all have had to take the one course the school offered.

To cite another example—only five students may be enrolled in a class in French. This takes a teacher and space for the same amount of time each day that a class for three or four times five students would require. And—there are probably others in the enrollment who would like to take a different language but since the school can afford to offer only one they must settle for second or third choices. Without stopping to argue the advantages of small class size, it is





obvious that any great extension of classes for a very few students would send the costs of education soaring.

Guide Lines for the Small School

How can the small school overcome the disadvantages that result from its size? One answer is to consolidate and become bigger. But many schools are still small after reorganization and consolidation have taken place. Moreover, it is the belief of educators, psychologists, and others concerned with learning that the small group is best for human endeavor; it is generally in the small group, they say, that real accomplishments take place.

The best program design for small schools is emerging as one that capitalizes on the fact of smallness while working to reduce the disadvantages of smallness. It seems to embody the following basic concepts;

• The basic form of organization for

learning—the small group—is maintained through flexible scheduling and multiple classes.

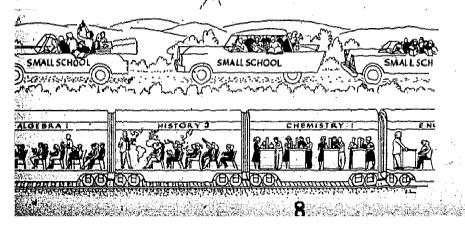
• The organization is general in nature, its parts closely coordinated and highly interdependent.

• The teacher is versatile and oriented toward stimulating and guiding the individual learner—interested in ways to teach the individual rather than in mass instruction techniques.

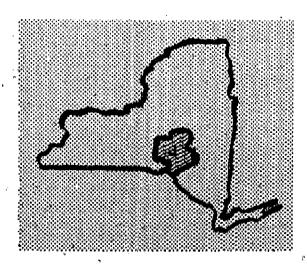
The pupil is an active participant, to a large degree a partner in planning and carrying out his program.
 The use of time, space, and equipment demonstrates awareness of new developments in technology—in transportation and particularly communications—while maintaining flexibility and drawing on all resources.

• The school reaches out and enlists the cooperation of all the agencies that can contribute to the enriching or improving of learning opportunities—cooperative board, colleges and universities, local groups, correspondence schools.

The concepts just identified have guided the direction of the Catskill Area Project in Small School Design. The way in which the people associated with this project have implemented these ideas is an exciting and unfinished story.



The Catskill Area Project Setting and Background



Area J, the geographic setting for the Catskill Area Project in Small School Design.

The Catskill Area Project in Small School Design (CAPSSD) could be said to have had its beginning in a principal's suggestion to use supervised correspondence courses to increase the variety of curricular offerings. This led to a meeting of several school personnel in and around this principal's school district (those schools in the shaded area labeled 1 on the map above).

When this "Study Group," as it was called, got together, discussion went on to include other things besides correspondence courses; it centered almost at once on the possibilities of starting an action

research project whose overall aim would be to explore all feasible ways of improving the quality of education in small schools. Thus the beginning of CAPSSP, financed by a grant from the Ford Foundation and now—in 1961—completing its fourth year of operation.

Oneonta State College of Education —Project Center and Coordinator

From its inception the Project has been a venture in cooperation and sharing. There was an early decision to get the ideas of all those who would participate or be affected by whatever steps were taken. Improvements in programs, the Project people reasoned, would be more likely and of better quality if they grew out of research within the schools with the teachers taking part.

Equally important was a center where all participants could come together for continuing inspiration and work. Oneonta State College has met this need. CAPSSD head-quarters are located there; College facilities are made available to the teachers of Project schools; members of the College staff have acted as consultants for group meetings and have taught enrichment courses for able students from the Project schools.

The School Districts in CAPSSD

The Project schools are located in the tri-county area of Delaware, Otsego, and Chanango counties. All are twelve-year schools; enrollments vary from 250 to 1,100 pupils: Each of the communities served has a small town as center but, with dairying the dominant occupation, many students live onfarms and commute to school by bus

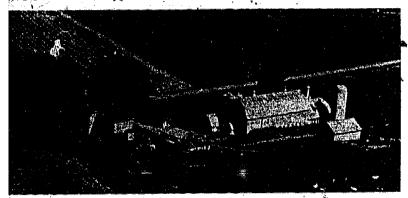
Businesses in the town are confined largely to serving the needs of the immediately surrounding areas, although there are usually small industries or manufacturing concerns to be found—processing of dairy products, woodworking, dressmaking. Often the schools are the largest single "business" in the district and employ the most people.

What Distinguishes CAPSSD Schools

Like all schools with small enrollments, perhaps the most characteristic feature to be observed
about Project schools is that the
human relations factor is basic.
Students, teachers, administrators,
parents really know each other.
There is a close relationship in
school and out that encourages
shaging. At school, everybody is in
one building—one student body,
one faculty, one administration,
and one continuous curriculum.



Main street-typical town-center-in-small-school-districts-



Dairy farms dot the landscape in the CAPSSD counties



Sawmilling-one of the occupations in the Catskill Area.

Teachers, guidance counselor, nurse, and "specials" of all kinds serve both elementary and secondary grades.

Another characteristic of these schools is the close interrelation between community life and school life. Having contact with both pupils and adults, the school is, both in structure and daily operation, a part of community life, and many community activities go on in the school building.

For all the natural advantages inherent in the CAPSSD schools, the basic limitation described in the previous pages has tended to operate—the small number of staff members that could be employed and hence a lack of variety in the kind of program offered. This limitation the Project set out to remedy. In effect its leaders said, "Flexibility must be the key to program design so that we can provide instruction to meet more of the individual needs of our students."

CAPSSD Roads to Better Education

From its beginning it has been Project policy to examine all possible avenues to better, more individualized instruction, Sharing services, not new in New York State, is one such avenue. The CAPSSD schools have expanded

this idea to include sharing students as well as facilities and teachers. Sharing has made possible the Saunday courses for able and ambitious students at Orieonta State College, and the after-school courses in several Project communities described later in this magazine.

CAPSSD schools have also experimented with flexible scheduling. This has developed along the lines of achieving longer periods and hence more opportunity for personal interaction between pupil and teacher. Four schools have adopted the idea of a floating period along with a new six-period day. This provides 58-minute periods, scheduled four times a week and allows two periods for activities of various kinds.

As it has worked out, Multiple Classes, School Aides, and Correspondence Courses—combined with extensive use of technological teaching equipment—have constituted the Project's main concentrations. Not all-of these will be found in one school, nor in the same form and to the 'same 'extent in any two schools. Principles and teachers in each case have made the decisions.

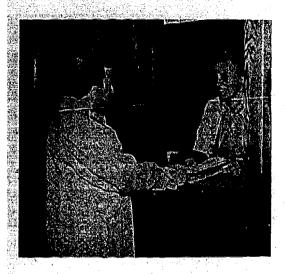
For research to have meaning it must be developed, tested, and applied in the local area. Through Projects such as CAPSD, teachers in small schools working cooperatively with others, in their own schools and neighboring schools, may pool their talents to provide new methods, materials, and techniques in their own classificories.

Evaluaçãon

Efforts to judge success or progress have, of course, gone on at all stages and levels throughout

Project experimentation. One principal speaking of results, feels that some of the most important achievements cannot be measured—in fact, are difficult to describe. These relate to the building of closer teacher relationships and morale through cooperative enterprise, new insights into the profession of teaching mili personal growth in that profession (pageses 37-43).

Correspondence Courses Meet Needs of Individuals



Mrs. Marion Hoagland at The Grand Gorge Post Office receiving corrected lessons.

The Catskill Area Project in Small School Design (CAPSSD), established in 1957 and financed by a grant from the Ford Foundation, is developing theories and techniques to add variety and improve the quality of education in rural schools with small enrollments. These schools usually have correspondingly small staffs and often limited facilities. In some areas. The kinds of practices that CAPSSD is developing to strengthen the offerings in small schools may be possible ways of enrichment for both large and small.

Throughout the upper Catskill region students in Central Schools are using supervised correspondence courses to expand and enrich their educational programs. Schools in the area are finding the courses a useful supplement to restricted

curricular offerings and an important means of meeting individual student needs and problems.

The Guidance Counselor at the Morris Central School was able to resolve a schedule conflict for an out-of-state transfer student who needed a Health course to meet State requirements for graduation; the one class in the subject conflicted with a second required subject. Unable to shift the classes in the schedule, the Counselor enrolled the student in a Health correspondence course. The course was successfully completed under the supervision of the Counselor, and the student was able to graduate with his class.

An exceptionally able student, graduate of the Franklin Central School was admitted to an advanced history course at Harvard University on the basis of his high school, record and a successful supervised correspondence study experience, Passing the World History Regents in one semester, the student enrolled in a Modern European History correspondence course, and under the guidance of an "interested and curious" history teacher completed the one-year course during the second semester.

A South Kortright Central School student, encouraged by his Supervising Principal, enrolled in a television servicing correspondence course. The boy's father, a television serviceman, joined him in the course. A graduate engineer, representative of a large manufacturer, served as a consultant, and the guidance counselor in the local school provided supervision for the course. Today the son has joined his father in a shop fully equipped with instruments recommended in the correspondence text,

A Study Group, 1 formed at the outset of the Project to review and implement correspondence courses ... in Project schools, has contributed much to the success of the program. The group gathered information regarding available courses, met with consultants from correspondence centers, and experimented with these courses in their own schools. These experiences were analyzed and a Guidebook for the Development of Supervised Correspandence Courses2 published. Following this lead, other schools within the Project initiated the use of supervised correspondence courses.

An intensive study of the correspondence programs in these schools has been under why during the past

^{1.} In 1961 members included: Paul Penrose, Downsville Central, Chairman; Marion Hoagland, Grand Gorge Central: Philip Putnam, Springfield (central; Grace Mojzis, Morris Contral; Nunziata Magistro, South Otselle Central; and John Stebbins, Cooperative Board, District No. 3, Delaware County.

2. Available upon request: Write Office of CAPSSD, Coordinator, 215 Home Economics Building, State University College of Education, Oneonia, N. Y.

year. Eighty of the ninety-one students who have worked or are now working with these courses were personally interviewed. Supervising principals, guidance counselors, teachers, and parents have been contacted to comment on their experiences and reactions.

Fashion design, analytic geometry, journalism, and ancient philosophers are but a few of the wide variety of courses studied by these students.

Use of SCS Courses

Three major uses—problems facing smaller schools—have been illustrated in the preceding accounts: (1) reducing schedule conflicts. (2) enriching the academic curriculum; and (3) extending

vocational services. Additional ways in which the courses have been employed are as follows:

Multiple Classes. A multiple class involving the use of supervised correspondence courses in solid geometry proved highly successful in Edmeston Central School. Four students worked together on the course in the same room and at the same time that a regular trigonometry class was being taught by the mathematics teacher. Help was available whenever required and the teacher was able to check the progress of the students.

Exploratory. A Roxbury Central School senior indicated that she would like to enter the field of journalism. School staff members



Marion Hoagland, English teacher at Grand Gorge Central, discusses some correspondence work with two students while other members of the class go ahead with small group assignments in the regular course.

assisted in selecting an appropriate correspondence course. The student completed the journalism course under the supervision of an English teacher. Having been accepted for admission at the Syracuse School of Journalism, the student, on the basis of her successful experience in the correspondence course, was invited to serve on the school paper during the summer preceding her matriculation.

Acceleration. Two exceptional students at the Milford Central School graduated in three years with an assist from supervised correspondence courses. Schedule conflicts in English were avoided through the use of an English correspondence course taken under the guidance and direction of the regular English teacher.

Changes in Majors. A business education teacher in the Downsville Central School encouraged an able commercial student in her sophomore year to consider a career in teaching. Needing two units of mathematics in the school of her choice, the student enrolled in a supervised elementary algebra course in late spring and completed her course work during the summer vacation under the guidance of the commercial teacher. She

then took Mathematics Ten during her junior year.

Transfer Student. A high school student from the Philippines transferred to a Project school early in the second semester. Having completed the first half of Latin I in her former school, the student wished to continue, but found that the school did not offer this language. She is now enrolled in a correspondence course in Latin, supervised by the regular French teacher.

Repeaters, A Grand Gorge Central School junior, having failed his third year of English and upset over the prospect of not graduating with his friends, enrolled in a correspondence course during the summer. He was supervised by an older brother, home from college for summer vacation. Although unable to complete the course prior to school in the fall, he had made such excellent progress that the school decided to place him in English 4 while he continued working on his correspondence course. He passed the Regents and received school credit for his correspondence course.

Alternate-year courses. A student transferring to Roxbury Central

School wished to complete four years of mathematics during his high school career. He had completed the advanced math course currently offered, so the guidance counselor had him enroll in a supervised correspondence course and he acquired the four-year sequence he desired.

College preparatory. A Spring-field Central School graduate discovered that the University in which he matriculated "expects" its science majors to be proficient in the use of the slide rule, but provides only the period of instruction in slide rule practice. A correspondence course enabled this student to save "fifteen to twenty minutes each night." Noting his ability with the rule, classmates came to him for instruction in its use.

Drop-outs. A Milford Central School "drop-out" obtained her high school diploma through the use of two supervised correspondence courses, units needed to meet graduation requirements. An English teacher, "always there to help you," and an interested junior high teacher, who motivated her to enrich the history correspondence course with library books, supervised.

Guiding Principles for SCS

Interviews with students and staff members of Project schools reveal several principles necessary for successful correspondence courses.

J. Stanley Young, Supervising Principal, South Otselic Central, suggests a three-legged stool as an appropriate analogy. The three legs are: (1) a recognized need on the part of the student, (2) initiative to meet this need, and (3) a sympathetic, interested staff member to guide,

Phil Putnam, teacher of agriculture, Springfield Central School, provided the sympathetic supervision in one instance. Two sophomores, extremely interested in agriculture, wanted more intensive training than the regular program offered. Phil got a correspondence course in Dairy Production to enrich the curriculum, and assumed grading of the papers. Since this is a normal function of the teacher of the correspondence center, the school was able to reduce its cost for the course. The sophomores, their motivation increased by an interested teacher, completed the course with flying colors.

Supervision is the key to successful programs. The dean of the faculty of a leading correspondence center reports that 99 per cent of

pervision complete their courses successfully, but that only 20 per cent of Service enrollees, who have no supervision, do so.

The Study Group on supervised correspondence courses, expanding on these three basic requirements, includes several warnings:

In relationship to the student, the Group states, "Not only must the student have the initiative to go ahead without the constant stimulus of a teacher or fellow students to set the pace, but he must also have a sense of personal

responsibility for carrying on the work" pos

"Do the work every day and don't do it sloppily," is a typical comment of students who have undertaken correspondence courses.

In relationship to the school, the Group points out, "There must be competent guidance for pupils in selecting the courses suitable to their needs and to their level of learning. It is highly desirable that both parents and the local teachers who will supervise the study participate in this guidance process."

A preliminary report on the im-



A multiple class situation in the Franklin Central School—an aspect of the Catskill Area Project that can be the means of adding another subject to a pupil's program and encourage independent effort at the same time. Margaret Law, teacher.

plementation of supervised correspondence courses in Project schools reveals that schools which provide a definite time and place for the course in the student's daily schedule contribute to the chances of successful completion.

A positive relationship exists between success in the courses and the attitude of students and teachers towards the courses. They should be considered on a par with academic subjects by the school, with school credit and reports to parents on the same basis as on regular classroom subjects.

Pitfalls to be Avoided

The study made of correspondence courses undertaken during this experimentation period in CAPSSD schools shows that of the ninetyone courses taken, fifty-nine have been completed, nine are in progress; and twenty-three were dropped. Two major reasons for dropping the courses in Project schools have been identified: (1) students al--ready over-burdened with academic subjects and extra-curricular activities attempt correspondence courses, and (2) school and career objectives of students change once the course has been started.

Interviews with students carrying school career. He had taken only full academic loads indicate that elementary algebra and found that some of them are unable to work college required two units of mathe-

on correspondence courses in regular school hours. One capable student, with a full academic and extfa-curricular program, often relegated this work to a secondary position, since homework on regular subjects took precedence. As a result, the student found himself farther and farther behind in the correspondence study. Interest lagged and he eventually dropped the course.

Both students and staff members affirm that correspondence courses are "not easy," and that the time devoted to their study should correspond roughly to regular classroom subjects. Dr. Allen E. Wierman, Assistant Supervisor, Correspondence Instruction, Pennsylvania State University, states, "If students are in a classroom in which the recitation and assignment method is used and they contribute nothing, the class goes on. In correspondence work, if the student stops working, the class stops."

Change of career objectives is a second major factor in drop-outs. A leading athlete in a Project school decided to become a physical education teacher late in his high school career. He had taken only elementary algebra and found that college required two units of mathe-

matics for admission. He enrolled in a plane geometry correspondence course, and was doing satisfactory work until all colleges of his choice rejected his application for admission because of his poor high school academic record. He could see no further use for the correspondence course and, against the recommendations of the staff, dropped it.

Implementing SCS in Local Systems

Involvement of faculty members in the planning for use of supervised correspondence courses is essential to their success. Similarly, understanding by the local board of education and the community of the purposes of the program is essential. Interviews with parents of students doing this type of study show they accept the courses as an attempt by the school to better meet the needs of their children. One parent remarks, "I only hope that the project continues until my younger daughter is in high school."

Since correspondence courses are considered a part of the school's total curriculum, they are generally paid for by local boards of education. In one experimental school students assumed initial payments, and the costs were refunded by the board upon completion of the courses.

Present courses in the Project schools have been used mainly in the junior-senior high grades. Problems at this level provide the impetus for initiating correspondence courses. Schools in the Project started the program slowly, with only a few pupils enrolled. However, as staff members work with students, experience breeds conviction and expanded plans for the future.

In most Project schools the guidance counselor serves as coordinator of the program. His function places him in contact with those special needs of students that can be effectively met through correspondence courses. Consideration should be given to the assignment of a regular member of the faculty, one especially interested in supervised correspondence study, as coordinator of the program.

Universities are beginning to recognize supervised correspondence study by superior high school students in their advanced standing or advanced placement programs. Each college or university has its own policy, however, and correspondence programs must be carefully coordinated with the college the student wishes to attend. Pennsylvania State University has

just published a catalog³ that lists college courses available through correspondence study and policies for their use by superior high school students,

Two publications on correspondence courses are available through. CAPSSD:

A folder, Directory of Supervised Correspondence Courses for High School Students,4 lists more than four hundred courses appropriate for use in New York Centrål Schools.

A booklet, Annotated Correspondence Courses, an evaluation of more than one hundred correspondence courses, has been produced by experienced teachers under the direction of the Study Group. It evaluates content, articulation with Regents requirements and quality of subject presentation.

Looking to the future

John Studebaker of American Schools, a private organization

to high school students and adults, makes the following observation regarding the place of supervised correspondence instruction in small schools:

"Certainly, plans of Supervised Correspondence Study offer no panacea to those faced with the many technical problems involved in secondary school education. By no stretch of the imagination should it be considered as a substitute for good classroom teaching under sound school procedures.

Supervised Correspondence Study does, however, offer effective means for supplementing the school program by meeting certain specific needs of individual students which cannot be filled for numerous practical reasons by the school's regular curricular offerings."

"I would have no hesitation to Supervised Correspondence Courses in the future," declared Cecil Fowston, Supervising Principal, Franklin Central School.

Experimentation with this method of meeting the specialized needs of students in the small school is providing correspondence courses a continuing in the Catskill area.

5, \$2.00. Also available through CAPSED Offices

^{3.} Home Study Courses, 1960-61—Correspondence Instruction Department, 304 McAllister Building, University Park, Pennsylvania. 4. Free: Write: Office of CAPSED, 215 Home Economics Building, State University College of Education, Oneonta, N. Y.

Multiple Classes Core of Small School Design



John Powers teaches a multiple class of general science and earth science at Andrew Draper Central (Schenevus).

A teacher remarked, when approached with the idea of teaching two subjects or more in the same room at the same time, a multiple class, "That is crazy—literally impossible!" Then she said she'd try. Today that same teacher, having experienced the multiple class situation for three years, says "I like it. I have time to talk with pupils—when they need to talk."

What is A Multiple Class?

What would a visitor to a multiple classroom see? At first glance, perhaps nothing different from the usual classroom. And, even on a closer look, certainly not the same thing in any two classrooms. Here's an overview of what could be observed in a multiple class in one Catskill Project school.

Fourteen pupils are learning French-nine take French I; five,



French II: The "atmosphere" in the room is different. Sensed almost immediately is the fact that there are several "centers of interest" instead of the typical "teacher before the class." The five pupils in French II are listening to a teacher-made tape that explains—one learns on inquiry—a reading lesson from the text and points to a grammar assignment. They listen; they stop the running and discuss a point; they replay.

Three of the nine French I pupils have on earphones and are listening to a commercial French recording that accompanies their text. But the other six are listening, as a group, to a teacher-made tape, orally filling blanks and checking each correct response with the one they have just given.

The teacher moves from group to group, but the French I students know, from a student-teacher planning session, that she will be with them just before the end of the period to explain a new unit. The French II people understand, also from a previous planning session, that during this time they'll be working on their own, with an assignment sheet as guide.

The organization of multiple classes is designed particularly to

increase curricular offerings and reduce scheduling difficulties in the small school. It has resulted in the development of techniques that can also be used advantageously by teachers in single subject classrooms.

The CAPSSD Coordinator calls the activity with multiple classes "the Project's most significant in many ways. The confidence attained by participating teachers," he says, "foreshadows great progress in multiple class teaching. They know it works." The Project's largest teacher study group is that devoted to explaining the hows, whys, and wherefores of teaching multiple classes.

Two Kinds of Multiple Classes

Among the 25 Catskill Project schools there are now sixty classrooms in which there are multiple classes. In forty-six of these, two or more different subjects are being taught; in fourteen, different levels of the same subject. Enrollments vary from six—four students in intermediate algebra and two in advanced mathematics—to upwards of forty. A teacher in the New Berlin central has twenty-five in Latin I and fourteen in Spanish II, a total of thirty-nine in one class.

Examples of multiple classes on

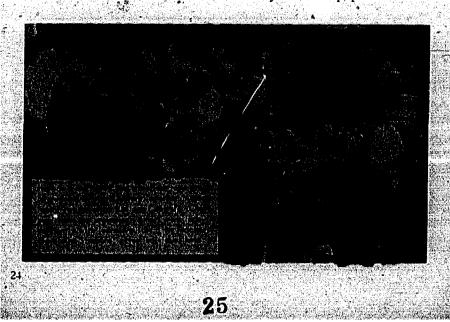
different levels of the same subject include those in which the course is adapted to Regents and non-Regents pupils: American history (29 pupils) at Draper Central (Schenevus); English III (28 pupils) at Margaretville; and world history (19 pupils) at Morris.

Ruth Simonson, Springfield Central, used the multiple class concept in a senior English class. With students of varying abilities working on journalism and business English, she conducted much of her program in a way similar to that of an elementary teacher whose pupils carry on many small group activities. At different times students worked as a class, then in two or three groups, and as individuals. An observer in this class-

room might not have noticed that a group of students contributing to a discussion of the principles of journalism were following a course outline different from that of another group working on copy format—that is, until the business-English group began a review of irregular verbs, and a person from the local press joined the journalism students to analyze some newspaper clippings.

Instructional Materials and Aids

The use of technological devices is in evidence in most of the rooms in which multiple classes are being taught by one teacher. Mary Scott at the Andrew Draper school in Schenevus, for example, relies heavily on this equipment in teach



ing six students shorthand and six others typing at the same time. In this case, a three-channel electronic device was developed by a fellow teacher, Don Gould. The students in shorthand use it to take dictation from a Dictabelt. Earphones eliminate noise and distractions that might occur from the typing people practicing their warm-up drills. Miss Scott also uses commercial recordings and makes her own tapes and learner guides. All of these free her from making all presentations orally and allow her more time to help individuals and small groups with particular problems.

"Visitors to my classes," says one teacher, "are often surprised, when questioning students, to learn that one section of a multiple class is not disturbed by the activities of another. Although we use earphones for some purposes, there are other instances in which students work as a group with recorded materials that are played over a loudspeaker. Even though the room is small, the speaker program seems not to bother other groups in the room. When you have a multiple class you realize more than ever that you can trust teenagers to accept responsibility and go ahead on their own."

Learner guides, outlines, assignment sheets, and workbooks—traditional materials—are, not absent from the multiple classroom. But other teaching aids—that pupils can

use by themselves—also have a place of importance. In Margaretville and Roxbury, converted juke boxes which play teacher—and commercially-prepared records help turn classrooms into pupil-centered fearning laboratories.

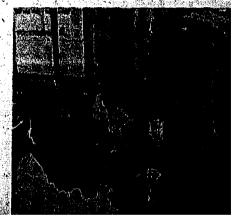
Teachers of multiple classes learn to make maximum use of varied materials—traditional and new.

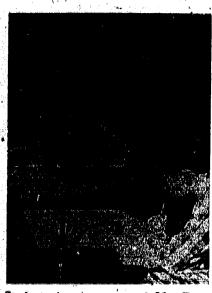
Some Outcomes—As Teachers See Them

The teachers conducting multiple classes are continuously reflecting and forming, expressing, and reforming judgments on the results of this kind of organization. The following observations are the fruits of preliminary efforts to pool their thinking:

Students assume responsibility for their learning. The pupil participation and involvement, which

Studyhall at Margaretville, with students listening to a teacher-made recording on the "Autotron."





Students in one group of Mr. Powers' multiple class in science (Schenevus) work on maps; a member of another group also carries on independently with a lesson guide.

are inherent in the multiple class situation, increase self-reliance. Students seem to develop initiative, become self-motivated to "take charge" of their own education. This is part of their preparation for college and adult life in which students must proceed alone.

Students learn to work together cooperatively. Helping one another in small groups reduces the evils of competitiveness that often exist in the traditional classroom—and pupils actually teach each other.

Student-teacher relationship is

improved. This comes about partly as a result of emphasis on student-teacher planning of long-term rather than day-to-day assignments, partly because the teacher "gets about" to work with individuals and small groups on a more informal basis. Students are perforce made to feel "I'm being treated as an adult."

Students may achieve at their own ability level. Multiple classes make it possible to group students for a purpose—a purpose they understand and accept. Many of the various adaptations of the multiple class idea have been made in direct response to needs and interests originating with individual students. Some discipline problems have been reduced when the work was better adjusted to the student's development level.

The multiple class atmosphere is student-centered. There is more time for individual student experiences. Motivation is toward learning rather than marks, Critical thinking and decision-making in the solution of problems can be stimulated, along with individual effort. Retention is extended by immediate checking. The teacher is no longer the only force supporting classroom activities; better study habits result.

One teacher put it this way:
"I used to conduct my classes in a
formal fashion, giving my students
'the gospel' according to a Latin or
French textbook, I now talk less, rely
on many materials and aids in presentations, And I find myself more
sensitive to the problems and questions of the students,"

To summarize these observations, one might conclude that any class organization which helps change the role of the teacher from one of teller, lecturer, assigner to guide, consultant, and developer of materials, and moves pupils from passive listening to purposeful doing means better education.

Starting Multiple Class Instruction

A question often asked by teachers considering multiple class instruction: "How does one find time to plan, prepare lesson guides and assignment outlines, cut tapes and records—and still mark papers and do all the other things that always have to be done?"

The teachers reply that it hasn't been easy. They add that they have had invaluable help from each other—from the Project Study Group on Multiple Class Teaching where they spend much time exploring ways of doing a better job, trading ideas, sharing materials and techniques.

One teacher points out that the first experience is the one requiring the most additional time for preparation. Now, she says, with

a backlog of experience and materials, she can really give attention to individual guidance and ways of improving the dynamics of small groups.

Without discounting the value of the experience, it is probably safe to say that nothing else quite takes the place of time for preparation and study when one is free from the pressures of teaching. On this premise, arrangements were made this past summer for teacher attendance at a workshop, which the Ford Foundation financed. Forty people attended the six-weeks session and received pay commensurate with their regular salaries.

Some boards of education, recognizing the values of this kind of summer work, are considering similar programs for teachers within their individual schools.

"I would hate to try my schedule without the help of our "School Aide," says another teacher. "She and I meet periodically to plan ways she can be of greatest assistance—she comes to my room to get material for guide sheets so they can be typed and reproduced, files my materials, records grades, acts as liaison between the librarians and myself, and provides help in countless other ways."

Observing a multiple class and talking with the teacher can pro-

vide the uninitiated with many insights. The "experienced" offer these suggestions to those who may be considering multiple classes:

 Start where you are—with a text—and prepare learner guides to go with textbook units

 Begin building up a variety of materials to go with the unit and guide

 Explore the possibilities of technological aids and devices

 Preplan, plan with students, replan. Learn to think of assignments in terms of weeks rather than days

• Prepare all those who will be concerned—other teachers, parents and students—for the changes that are to take place. Make sure this educating or selling job includes a chance to question and sense the meaning of multiple class concepts. Understanding is essential to the acceptance and cooperation on which success depends.

Accepting the importance of "having your students with you," Regis Hammond, business education teacher at Downsville Central, describes a memorandum he prepares for students entering multiple classes for the first time:

"You can learn much from your class associates, and they can learn from you," this memorandum tells them. "Your attitude must, then, involve consideration of others and a willingness to share your ideas in group discussions. Here you share responsibility for learning with the teacher and other students.

"You will have to think for yourself, be critical of your own work, and initiate ways of doing things. "A boy or girl who develops the ability to work well in this situation will be able to get a lot more out of his education than under the old one-group, one-assignment type of instruction."

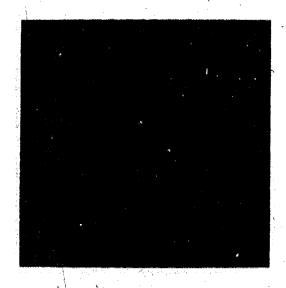
Like All Roads to improvement . . .

There are no cure-alls, no one-ways streets to the solution of all problems affecting better education. The concept of multiple classes is not suggested as such. However, the possibilities of this practice have moved far beyond the original purpose of enriching the curriculum of the small school without adding to scheduling problems.

Because of its ramifications, the multiple class concept has become, in many ways, the core of the CAPSSD experiment. Without it as a framework, maximum use could not be made of other innovations — correspondence courses school aides, technological devices, enrichment projects. At the same time, all these contribute to the benefits realizable through the multiple class situation.

As is the case in all roads to school improvement, the degree of success with multiple classes is largely dependent on the teacher's willingness to experiment, adapt, apply, extend here, limit therealways with a flexible, open mind.

School Aides Give Teacher Time To Teach



On playground duty as school aide at Richfield Springs, Ashley Strong reminds pupils about a play regulation.

Schools affiliated with the Catskill Area Project in Small School Design (CAPSSD) are employing school aides¹ to perform a great variety of the essential but non-instructional chores done by teachers. This practice, they find, is a substantial help in giving teachers more time to do the professional work for which they have prepared themselves—teaching children.

Teachers have always spent a sizeable portion of their time keeping books and house—collecting money for milk, lunches, "causes," typing and duplicating, supervising lunchrooms, corridors, study halls, playgrounds—performing the myriad duties that are part of carrying out the school program.

^{1.} Classified by some CAPSED schools as "School Monitors," under Civil Service non-competitive exempt classification,

There is no question as to whether the doing of these tasks contributes to the learning situation. It does, and the doing frequently provides opportunities for valuable interaction between teachers and pupils. Nor is there any question as to whether these jobs require the skills and effort of competent people. They do, and all persons who work with children must be carefully selected. However, the basic question, and the one that has been concerning the Catskill people, is whether—all things considered—many of these non-instructional chores might better be handled by non-certified workers and give teachers time for more and better teaching. The answer—the Catskill Area people believe, after four years of study—is a resounding Yes,

What Is A School Aide?

It is easier to give examples of what school aides do than to frame an overall definition that will fit all examples. However, in CAPSSD terminology a school aide is any multi-skilled adult employed to perform many non-instructional chores—particularly those that rob the teacher of time to do the kind of teaching she would otherwise do.

More likely than not, a school aide will find herself (or himself) doing half a dozen different jobs during the course of a day rather than one; by the same token, the things she does are non-instructional chores formerly done by a number of different teachers. Thus a school aide serves the children and a school rather than a single teacher.

In the 1960-61 school year, fiftysix school aides—twenty-five fulltime and thirty-one part-time—were employed in CAPSSD schools. Their salaries, in each case, were included in the regular budget of the local school.

What School Aides Do

Calling school aides "one of the greatest contributions of the Cat-skill Project," Warren Ryther, Principal at Morris Central, would like two more of them in his school—to correct objective tests, mark report cards, and assist in the guidance office. Hicks Dow (New Berlin) sees school aides as a way to give teachers a much-needed thirty minutes off at noon-time; Addison Smith (Gilbertsville) thinks possibilities for more effective use of school aides are expanding all the time.

Here are ways in which school aides are presently giving direct assistance to teachers in the Catskill Project schools:

- . Typing and running tests
- Checking papers
- · Averaging marks

- · Checking attendance
- Maintaining bulletin boards
- Making posters
- Helping with assemblies and plays.
- · Locating reference material
- Making booklists
- Preparing charts
- Distributing materials
- · Assisting with lab equipment
- Providing relief in emergencies
- Helping procter examinations
- · Assembling audio-visual equipment
- Supervising class committees
- Making holiday decorations
- Helping with dances and parties

The monitoring jobs school aides take over extend from the class-room and library to school buses and traffic patrol—with study halls, cafeteria, detention room, and playground in between. They handle nigh countless money transactions with pupils—for lunch tickets, supplies, banking, magazines, book club, yearbook, dues, contributions, and tickets for plays and games.

School Aides Must Be Versatile

Happily, since the tasks school aides are called on to perform seem both countless and unclassifiable, the people who take these jobs usually turn out to be the flexible kind who can adapt to interruptions and new situations. But mindful of the importance of setting limits—as well as to encourage learning on the job—Stanley

Church, Principal at Milford, advises starting the aide with a small number of duties and "working up."

One school aide at Milford, Katherine Nielson, volunteered to serve the school without pay, for "something to do" when she suddenly found her family "all out for the day." This was before the CAP-SSD experiment with school aides began. Today Mrs. Nielson is on the payroll. A list of things she handles of direct benefit to teachers looks like this:

- 1, Attendance—daily preparation of absentee listing, check of elementary registers, preparation of final register report every five weeks.
- 2. Noon-hour study hall listing. .
- 3. Monitoring study hall.
- 4. Typing stencils and ditto masters
- 5. Supervising classrooms in emergency situations
- 6. Checking teaching supplies and materials in and out.

In addition to these chores, Mrs. Nielson also spends time at such office jobs as transcribing letters and memos, duplicating cafeteria menus, preparing purchase orders, taking sick children home, copying state reports, and redrafting minutes for the Board of Education and Cooperative Services.

"I like it" is Mrs. Nielson's re-

action to all this. "It has helped me understand my own children better. Now I know that my three daughters (all adolescents) are three entirely different individuals who have to be treated differently."

Katherine Seeber, school aide at Laurens Central, has to step out of her role as kindergarten assistant when lunchtime arrives and supervise the cafeteria. And it takes versatility to work with many different children and adults as well as at many different jobs. Lillian Fucci (Hancock) assists all the kindergarten and first grade teachers. You might find her supervising nap periods (or doing the before and after chores), helping with wraps, making fancy hats, or cards for phonics drill.

Extensive Use of School Aldes

Aides at Hancock Central, where seven regulars are employed, have become such an integral part of the school operation that provision is made for an aide substitute if one of the regulars has to be absent. The substitute who is called in this eventuality, Lois Shaw, spent seven days of her own time learning the different schedules and practices of

Attendance record personified, Barbara Coddington, school aide at Andes Central, reviews data with Principal Lloyd Johns. each of the aides so that she would be prepared to take over the duties of any one of them. Recently, when Mrs. Shaw reported for duty because of an aide's illness, she knew the routine exactly—preparing and servicing the dessert table, relieving second and third grade teachers during play periods, and monitoring a study hall.

Aides at Hancock are each em-



One of Hancock's school aides, Catherine Crosby, takes over the equipment angle of showing a film while the teacher concentrates on content and teaching aspects.





ployed for four hours a daytwenty hours a week. The duties of each are well defined and, in this case, there is some specialization. For example, Ruth Turner is a study hall monitor.2 Leaving home after her children have gone to school, she spends her four hours at study hall duty and is back home before her children return. But the important thing about Mrs. Turner's twenty-hour stint each week is that it means twenty hours extra the professional staff can spend planning and preparing for better classroom instruction.

This conducive-to-digestion atmosphere (at Richfield Springs) is maintained by school aide Winifred Goodale—giving teachers time to eat, too.

... and When They Have Time . . .

It is probably safe to say that one of the first things teachers do with the added moments that the assistance of school aides brings is the luxury of "thinking before leaping." But to be more concrete.

They plan assignments and units of work on a long-term basis rather than on day-by-day jumps.

They search for a variety of books and materials from which pupils can learn, and a variety of exercises and things to do.

They figure out ways to make a dull but essential topic more interesting.

They look for ideas to challenge that very bright boy who is too often bored and willing to settle for a lick and a promise instead of digging deeper.

They try to figure out and find some simple and worthwhile exercises certain slow learners can work on alone—a; school or at home.

^{2.} Those with questions about insurance coverage in the event of accidents with only a school aide on duty are referred to Formal Opinion 140 on Counsel to the State Education Department Division of Law, Board of Education—Powers and Duties, Employment of Teacher Aides (dated 4/4/58), Project schools find insurance carriers most willing to accept school aides under the terms of complete coverage, considering each to be "under the direct supervision" of the chief school administrator,

They take Johnnie—or Mary, or Susie—out of study hall for a conference on a paper full of the kind of errors that only individual teaching will remedy.

They meet with Johnnie's parents to get acquainted and try to understand how each "sees" Johnnie and deals with him.

They analyze the results of a pupil's standardized test to spot his strengths and weaknesses, and follow up in a talk with the counselor.

They go to the library and hunt out special references, then arrange with the librarian for use of these by their students.

They preview films and film strips so that they know their contents and possibilities for use in the teaching-learning process before the pupils see them.

They run through a lab experiment or demonstration and are prepared to make it a much better learning situation when their pupils attempt it later.

They consult with the music teacher about some records to use in history class.

They get together to talk over

Librarian Marjorie Rose talks with Mary Jane Penrose, a former school aide at Downsville, about some books one of the teachers requested. possibilities for relating the work each is teaching—integrating social studies and English, science and social studies, music and physical education.

They schedule a meeting for a special committee on curriculum.

They—at last—bring some order into that pile of pictures and clippings, long since too disorganized to be useful when needed.

... and sometimes they just eat a leisurely lunch and that with colleagues about yesterday's game or today's weather.

In Deciding To Employ School Aides.

Out of their experience with lay workers in the school, the people in the Catskill Area Project have arrived at a number of general conclusions that might be labeled advice for any school system that is considering the employment of





school aides. Some of these, of course, are not unlike those that apply to decisions regarding the professional staff:

Assessment of needs. Where they are, what school aides could do that would help to improve the school program should be carefully weighed by the staff as a whole. Failure to identify needs and purpose and work loads can only lead to wasted time—and problems—after the school aide is on the job. This is also a preliminary step to determining what the specific functions of each aide are to be—equally important among first considerations.

School aide vs teacher aide. Catskill Project people make a distinction between these two terms, the school aide (which they recommend) being the lay person who assists a number of staff members in various ways, the teacher aide being an assistant to a single teacher. And—from the outset, they say, it must be understood that the aide is to assist personnel, not to replace a teacher.

Selecting the school aide. Not every one can be a successful school aide. Naturally, each will be selected on the basis of his apparent ability to meet the needs that have been

specified. Attention must also be given to personal characteristics and potential for working with others—adults and children. In their associations with pupils, all aides in the Catskill Project Schools are expected to maintain the same relationship as a teacher. They must be able to establish rapport with children and young people, and possess such qualities as patience and a sense of humor—along with the kind of integrity that elicits respect.

Edward Onody, Hancock Principal, describes those who should be considered for employment this way:

High caliber people—those who have proven themselves in the community through leadership in various, groups or fund-raising drives; those who have had or now have children; and those respected within the community.

Obviously, school aides must be selected with an eye to relations with the public, since they will likely be interpreters of many facets of the school program to other lay people in the community. Consideration of loyalty to public education and a sense of ethics cannot, therefore, be overlooked.

Orienting the school aide. Administrators these days take necessity for orienting new teachers for

granted. It is just as essential for non-certified staff members. With aides serving in a multi-capacity, as so many of them do in Catskill schools, outlining their total job and coordinating their work with the several staff members that are involved is usually the responsibility of the principal. But individual teachers have an obligation, too—to guide and direct, as well as to be mindful of highs and lows in an aide's work load.

To help in general orientation, Hancock has prepared its own "School Aides Information and Guidebook." A CAPSSD brochure entitled "School Aides at Work" provides general information which any given school can supplement with specifics. For in-service growth, CAPSSD operates a regular study group for school aides just as it does for teachers involved in other Project activities.

In the Catskill Area Schools, aides become integral members of the staff. Some of them attend faculty meetings; others do not. This is usually determined by the nature of the work that the aide does.

Planning for use of more time. Since a major reason for the employment of school aides is to give teachers more time to plan improvements in their teaching, inauguration of any extensive use of school aides might well carry with it staff agreement on some specific areas in which teachers will work to bring about better learning opportunities. This will require allstaff cooperation and—for best results—is something that should not be left to chance.

What will school aides cost? Most aides in the Project schools are employed on an hourly basis, at rates ranging from \$1.25 to \$2.25 per hour. Hancock Central has established a salary schedule for aides: For a twenty-hour week, the beginning salary is \$25.00. An increase of \$5.00 per week is provided for each additional year of service to a maximum of \$45.00.

A Challenge

"What a school aide can do is a long way from being settled," according to the Coordinator of the CAPSSD program. The schools participating in this experiment have demonstrated that the employment of carefully selected non-certified employees for clearly specified non-instructional work can be a way of providing children with more learning opportunities of greater variety and better quality. Surely many refinements lie ahead.

Teachers Teach As Teachers Grow



Lyle Roberts, Assistant Director of CAPSSD, rings the bell summoning forty teachers to a session of the 1960 Summer Workshop where they planned for the development of enrichment techniques and materials.

There is reportedly an old recipe that begins, "To make a rabbit stew, first catch your rabbit." Participants in the CAPSSD Project would surely go along with an adaptation of this—"To enrich learning possibilities for young people, first enrich opportunities for their teachers." The CAPSSD people "might" delete the word, "first," since in their experience enrichment for pupils and teachers has proceeded simultaneously. But all of them know that the exploration, development, and adaptation which have spelled enrichment for their pupils would have been impossible without teachers willing and able to blaze new trails. And they are as fully aware that every-



thing each teacher has done to improve his or her classroom work has added inevitably to personal professional growth.

Every CAPSSD activity discussed in this series has as its underlying purpose enriching fearning opportunities. This is true of supervised correspondence courses, multiple classes, school aides, technological devices. But we have still to look at the out-of-school enrichment experiences the Project has sponsored for the able and ambitious students—the Saturday morning seminars at Oneonta, the special afternoon and evening classes made possible by interschool cooperation. And—to round out the picture—we must review the in-service measures through which teachers have benefitted themselves as well as their pupils.

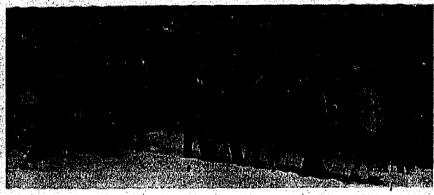
A Pre-Taste of College

Starting in 1958 with thirty-five students and two courses, CAPSSD's college courses for high school students at Oneonta, in 1960-61, enrolled 115 students in five different classes. They included Humanities I and II, Mathematics, Science, and Social Studies.

Snow and sleet and rain were no barrier to attendance at these

Saturday morning sessions—though some students may have had to roll out at 5:30 A.M. to eatch the bus to travel the fifty miles. Robert White, a Hancock student who attended one of these science sessions last year, had this to say about it: The course was fascinating to me. Several professors joined in revealing to us some of the interesting aspects of science that high school students usually don't get—partic-

Some of the students in CAPSSD schools who enrolled for Saturday morning enrichment seminars at Oneonta—on their way to the bus.



ularly students from a small school. I was especially interested in physiology, for my ambition was, and is, to be a medical doctor.

truly helpful individuals, concerned with seeing that we learned as much as possible. There were no slackers among the students either. None was holding back the progress of the group. Most important, we were able to concentrate on our work for two-and-one-half, uninterrupted hours.

Robert, who took the math seminar the following year, winds up his comments by rating the college seminars "a superb idea for high school education in rural areas," and one he hopes will spread.

The seminars have come to be associated with excellence, but excellence does not imply "gifted." It refers simply to students who have both the ability and motivation to do work over and beyond their regular high school courses.

Harold Skinner (Otego Principal) says the seminars have been a real incentive to students to broaden their horizons. Gilbert Slater (Unadilla Principal) sees these courses as an impetus to independent study—the student is forewarned of the amount and kind of work he is going to encounter in college. High school teachers have been gratified to have the seminar students bring topics

and problem; for discussion back into high school classes—an added spark for everybody.

All in all the \$30 per pupil which the local boards of education pay for participation in this program is considered "well spent." The courses are non-credit, but several of the students enrolled have already discovered dividends. Jane Faber (Gilbertsville graduate) who had the mathematics seminar at Oneonta could compete very satisfactorily with an advanced group at Rochester University the following year. Joan Matteson (Morris), currently at Onconta as a college student, is likewise appreciative of having had a pre-taste of college as a CAPSSD student.

Enrichment Courses Through Inter-school Cooperation

There have been other "head stretching courses" for the able and ambitious, held in the Project schools after regular hours. One was a course in the Russian language—at Delhi Central, two hours once a week for students from Delaware, Delhi, and Margaretville. An Oneonta public school teacher was in charge, but Robert Knight and Richard Nealon from Delhi, and Florence Coons from Margaretville attended the classes and worked with their students in

their respective schools. The students made extensive use of recordings. A trip to the Russian monastery at Jordanville was one of the highlights of the sessions.

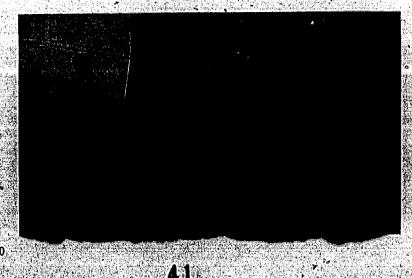
An enrichment course in literature at Andes Central on Wednesday evenings was arranged through the cooperative efforts of that school and Margaretville. Dewey Hornbeck of the Andes English Department led the discussions—on such works as Tolstoy's War and Peace and Huxley's Brave New World.

Sixteen students from Richfield Springs, Edmeston, and New Berlin have completed their second semester of an enrichment experience—a college course in Logic, which met once a week after school at Edmeston; the other days, students used programed lessons and a teaching machine. These materials—the same as those used by students in the Logic course at Hamilton College—are soon to be followed by similar ones in other fields and grades.

Automated teaching materials, that present the lessons to be learned in short steps in specially designed sheets or on tapes for use in pupil-operated machines — are arousing nation-wide interest. John Jacobs, Hamilton College Profes-

Milford students see one of the Harvey White physics films—a series of 162 lessons, which students can pursue with or without the direction of a

teacher. Richard Bates is teacher here; Principal Stanley Church and the custodian are responsible for the rear view projection device shown.



sor, says, "Aside from their merit in ordinary situations, programed lessons might have special merit in small schools. They could make available those courses that only a few students are qualified to take."

in Step With Technology

Self-teaching books or other teaching machines however effective in enriching and expanding learning opportunities for pupils are not self-made. Corey, in his Action Research To Imbrove School Practices, says, "Most of the study of what should be kept in the schools and what should go and what should be added must be done in the hundreds of thousands of classrooms in thousands of American Communities. The studies must be undertaken by those who may have to change the way they do things as the result of the studies,"

For four years now, staff members in the Catskill Area Project have been encouraged, and helped to "change the way they do things." Technological devices, of which the teaching machine so-called is illustrative, have been one stimulus for experimentation and invention. Donald Gould's three-circuit arrangement enabled business educa-

tion teachers to use any one of three kind of lessons—on tape. records, or dictaphone. Margaretville teachers have cut a number of records of their own for library use by students on the autotron. Primary teachers in the Andes and Margaretville schools are developing a series of records, with the idea that small groups can play them while the teacher is busy helping some one pupil. Making Change is the title of one such recording, initiated by Principal Fred Barraco and cut for use in first grade by Betty Martin. . . .

Study Groups: Teacher Enrichment

The Catskill Area Project has provided evidence that many of the pressing problems of the small school can be dealt with in the school as laboratory, with teachers as innovators. Practices change within the classroom while teachers are engaged in study groups, exploring problems and developing solutions for try-out.

Some Project study groups are subject-matter focused; others cut across subject-matter lines to other fields of interest, such as multiple classes or administrative practices. The inter-school study groups set up by the Project have had a special significance for teachers in the

CAPSSD School administrators, meeting at a local lodge in late summer work out general Project plans for the coming year.

small school where frequently there is only one teacher of a particular subject in the school and sharing is per force limited. "It's wonderful to work with other people," says Margaret Hazlett (Abraham Kellogg), "to exchange ideas and materials with other English teachers with similar problems."

This is in-service training with a new twist. These teachers have been doing as well as listening. From their meetings new techniques have been energized within the local schools and the results returned for the group's enrichment. For example:

"What we do;" says Harold Colf of the Franklin Central, about the Saturday Morning Math Study Group, "is to try to tie in the materials we talk about and discuss their use within the classrooms." Mr. Colf and five other teachers devoted their discussions to modern

mathematics, probability and statistics, and an experimenal course for twelfth graders.

The foreign language group has maintained close ties with Colgate University, and with Hamilton which supplied audio tapes and consultants on programed materials. Margaret Law (Franklin) and Malcolm Hartwell (Milford) are using these new devices with their classes.

One hundred elementary teachers recently swelled the Project's study group roster. Some of these organized to go to work immediately on problems of teaching individualized reading; a second group concerned itself with studying the non-graded elementary; a third with all types of technological aids—wherever and however these can be used to advantage in the elementary grades.

The 1960 Summer Workshop

The Project Coordinator called the Workshop "a very rewarding part of the total experience." And it has truly provided evidence of what teachers can do when they have the time. As mentioned earlier (CENTRAL IDEAS, Feb., '61, p. 29) the 1960 Workshop, a kind of pilot, provided a four-day opening meeting at Oneonta State College, four weeks of independent workat home or wherever the individual wished—and a two-day wind-up session at Cooperstown. Here are examples of the kinds of things that "got done" as a result of the 1960 Workshop:

- Stan Burton, Downsville agriculture teacher, worked on a booklet describing his invention for moving shop equipment
- Ralph Vahue, New Berlin industrial arts teacher, prepared a series of "flip" cards for use by students who can proceed on their own if they have written instructions.
- James Coutant laid the groundwork for using some ninety tapes now on tap for Morris Spanish classes.
- e Leland Parks, art teacher at Franklin, worked on the slides and script for his "Self-Teaching Art Appreciation" project. (He has ideas for a whole course of these).
- Tom Matalavage, teacher of mathematics at Margaretville, programed thirteen geometry theorems, for use directly by students, or for adaptation on a machine

 Phil Putnam, Springfield teacher, developed a unit of study for a multiple class on "Use and Care of Farm Machinery."

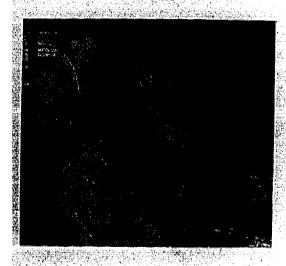
To enroll in the Summer Workshop (pay commensurate with that during the regular year) teachers had merely to "have some idea or project you want to develop or work on." This was an easy requirement for CAPSSD teachers—people who seem constantly to have "something they want to explore, develop, work on, grow on."

And so this pilot workshop, like many of the other CAPSD activities, has demonstrated something that alert teachers and administrators knew already: there is no dearth of ideas for improving the quality of education; rather it is a matter of time—free from routine pressures—for doing the work necessary to carry out the ideas.



One group of the Summer Workshop, participants makes good use of the Oneonta College library.

Organizing Small Schools For Coordinated Improvement



The New York State Commissioner of Education James A. Allen and District Superintendent Amenzo N. Merrill observe a young artist at work at Treadwell Central.

Small school districts do not have the resources necessary to provide the development and research necessary for continuous improvement. Each small district acting alone means duplication of effort, but a number of them working together through a federated organization such as the modern study council can be effective. As a voluntary, extra-legal group, individual school districts can pool and share best practices and carry on research that bears on common problems. Examples are the Catskill Area Study Council, the original group from which CAPSSD developed, and Central School

Study, affiliated with the Institute of Administrative Research at Teachers College, Columbia University. Study councils normally draw on the resources of a nearby college or university in addition to the collective resources of the participating school districts.

Federation vs. Centralization

CAPSSD itself is a loosely organized federation of twenty-five school districts, and six supervisory districts. Its program for the year is first discussed in study groups and general meetings where the ideas of all can be mobilized. Then through discussions of an Executive Committee plans are finally crystallized and put into operation. On the Executive Committee are Representatives of the school administrators—supervising principals and district superintendents—and representatives of the Oneonta State University College of Education, of Teachers College Columbia University, and of New York's State Department of Education.

Freedom vs. Control

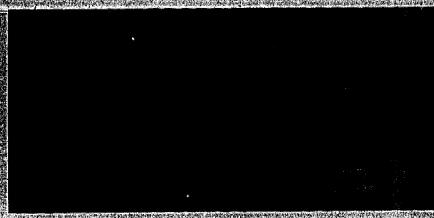
To achieve its purposes it was important that CAPSSD work in several areas simultaneously. One of its decisions was to do intensive development in the use of technological communication devices, which are applicable in many areas. Also, it became apparent that working on several areas simultaneously would give more individual schools and teachers opportunity to follow their own particular interests

and meet needs that they felt personally.

No one of the CAPSD schools participated in all the areas that have been discussed in the preceding pages; no one of these areas was participated in by all CAPSSD schools. Some schools and teachers that enthusiastically engaged in certain areas were definitely opposed to working in others.

Interest and activity in the Project among individuals and schools have varied widely throughout the four years of the Project's existence. Some teachers who were very skeptical one year became enthusiastic and effective leaders later. As would be expected, those who gained the greatest satisfaction from Project activities were those generally inclined to create and try new methods. Interest has always been greatest when teachers had maximum opportunity to work on their own problems and help develop programs in study groups.

Experience in the Project has shown that creative thinking is both the result and the cause of teachers' initiative and enthusiasm. Teachers who have a real and



A local school faculty meets to discuss progress and next steps in the particular phases of the CAPSSD developments in which it is working:

sincere interest in education must have freedom to develop their ideas; they thrive under the stimu-"the experts." ...

CAPSSD has found it best to call on consultants sparingly, especially the first year. Teachers must have time to get acquainted with each other and with each other's thinking. After they have a fairly clear idea of what they consider a good program of action, they can select consultants accordingly. The consultants may be people who can contribute knowledge in a special area, or be of help in a identifying relationships and implications of Project activities to education in general.

In CAPSSD nobody has sat in

judgment as to what idea should or should not be explored Erobably few of the new things that have lation of their peers; they welcome scome out of the Project would the advice, not the domination of whave been started but for the willingness of those responsible to respect the ideas of each individual participant, and to encourage each other to act on his own hunches.

> The Project has limited itself neither to in-service growth of participants nor to improving merely traditional means of learning. It has focused on trying and developing whatever can help the small school. For example, as the study of Multiple Classes progressed, it became clear that learner guides are essential for individual and small group learning, pursued through pupil initiative and responsibility. These guides are on

paper, magnetic tape, records, and learning machines.

Delineate the Purpose

An early decision must be made in a project of this kind to distinguish between evaluating methods now in use and developing new techniques. These purposes are not compatible. Only if the emphasis is on mobilizing for creative development, only if participants have freedom to make mistakes, will improvements come. Evaluation will then be the subjective judgment of the participants and observers. Objective tests or other means of measurement will be of auxiliary use. Certainly methods of evalution involving control groups, are not adaptable - not

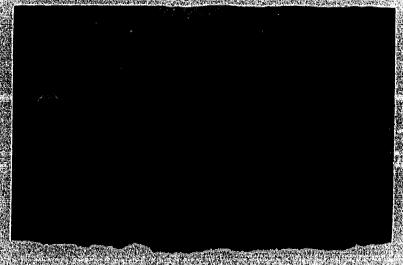
when the progress of one pupil in the school is to be measured!

Cooperating Institutions

Emphasis on the importance of local initiative should in no sense be interpreted as meaning that the cooperating institutions have not played a major role in the work of the Catskill Project. Besides the colleges that have provided resources of various kinds—Oneonta State University College of Education, Hamilton, Colgate, Teachers College—the State Department has been an active, interested member of the team.

Graduate students have assisted study groups in obtaining information and in preparing reports, Thirteen doctoral projects;

A subcommittee on multiple classes and the state Supervisor of Business Education leave a meeting on publications.



prepared or in process during the four years of CAPSSD operation, provide a substantial basis for further progress in improving small schools. The doctoral projects are in the following areas:

- · Practices for small schools
- Administrator-board relations
- Shared services
- · Music
- Transportation
- School aides
- Technological communications
- Flexible scheduling
- Multiple classes
- Supervised correspondence study
- Concepts of small school design.
- Buildings and facilities
- The role of the principal in school improvement.

Problems and Admonitions

The federated, coordinated type of organization for school improve-

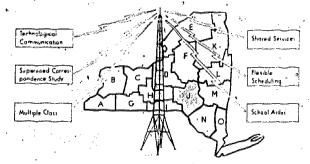
ment is not without its problems. Because of the lack of rigid controls, allowing leeway for activities to proceed toward common objectives, progress may not be at a steady pace. But rapid spurts followed by periods of inertia may be much healthier in the end. This kind of progress is certainly prefered to a uniform speed maintained by artificial, external stimuli.

A second problem is staying on the track and not being diverted to interests outside the goal, however laudable the distracting influences may be.

Finally, it must be remembered that creative improvement of schools, cannot be launched into orbit of the assumption that it will continue automatically on its war. Continuous attention and encouragement—and consideration of nexts steps—are necessary.

Central School Study-Catskill Area Project

Pooling and Sharing Practices in Small School Design



Central Schools Boards Committee for Educational Research A Committee of the New York State School Boards Association, Inc. An Affiliate of the Institute of Administrative Research "Teachers College, Columbia University