A university department can often give invaluable assistance as it participates in a fact-finding phase of a curriculum project. This article reports on one university's research contribution to state-wide curriculum planning.

Curriculum improvement on a state-wide basis includes the participation of a number of agencies and groups, among which are the state teacher-education institutions. In Wisconsin, staff members of the state colleges and the university have served actively on curriculum committees sponsored by the State Department of Public Instruction. In addition to such activities, however, faculty members of these institutions have also participated through the carrying on of research projects which contribute directly or indirectly to state-wide curriculum improvement.

One research project, among several of this type carried on at the University of Wisconsin, was an inquiry into multiple-period class organization in the high schools of the state. The term "multiple-period" is used to mean a class meeting two or more class periods daily, which replaces or combines two or more general education subjects, such as English, social studies, mathematics, and science, and is taught either by one teacher or by a team of teachers. The writers believed that a study of this kind could make two possible contributions to curriculum improvement: (a) by helping to clarify the reasons or the philosophy which motivated the initiation of such classes; and (b) by making available information about the specific patterns and practices prevailing in such classes. The project was initiated by the writers and was given official encouragement by the university in the form of a grant from the research funds of the graduate school.

Information was gathered through the following procedures:

1. An initial post-card survey which located 44 junior and senior high schools with multiple-period organization of the kind defined in the study;
2. A visit to each school by one of the writers for the purpose of interviewing the administration personnel on the purposes and practices in the multiple-period organization on an all-school basis;
3. Interviews with 41 teachers in 15

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of the schools to explore the viewpoints and reactions of people carrying on the work in the classroom setting;

4. The gathering of written comments about the multiple-period organization from students in eleven classes distributed over five of the schools.

One of the major questions raised in the interviews with administrators was that of the philosophy or reasons for inaugurating multiple-period classes. This was felt to be a fundamental problem, since although a multiple-period class may be used for a core philosophy, it may also be used in other curriculum patterns and for other reasons. Since most schools had several reasons for starting their programs, administrators were asked to make some judgments concerning the relative importance of these reasons.

Among other questions raised with administrators in these interviews were the following: On what grade levels are the multiple-period classes used? How many students, classes and teachers are working in the multiple-period program? What are the classes named? What subjects are replaced, if any? Are the classes required or elective? How was the program started? How in general is the program regarded by teachers and students? What evaluation activities are carried on? The writers assumed that responses to these questions would help to define more specifically the extent and character of multiple-period organization in Wisconsin high schools.

**Why and How Programs Were Started**

In the 44 school programs studied, administrative leadership played a very important part in initiating multiple-period programs. In only seven schools did the initiative appear to come from teachers.

In 12 schools the first reason for starting the multiple-period programs was to provide better transition of the students to the work of the junior high schools. The reduction of the daily pupil-teacher ratio both for teachers and pupils was given as the first reason in nine schools and this reason appears as one of the first three reasons in 21 of the schools. To provide for subject correlation or fusion appears as a first reason in five schools and as one of the first three reasons in 19 schools. Fourteen schools listed as one of the three reasons that of helping meet needs of students through emphasis on personal problems and social development. Improvement of teaching procedures was given among the three reasons in eight schools, although no school gave it as a first reason.

**Patterns of Organization**

Multiple-period classes in the 44 schools were found from grades seven through twelve. Slightly more than half of these schools have confined their multiple-period work to the seventh and eighth grades. Twenty of the schools were experimenting with multiple-period classes at one grade level only. Five schools had introduced some multiple-period classes for all the grades in the school. In the 44 schools offering the multiple-period programs in 1950-51 there were 201 teachers working with 7157 students in 271 sections. In 30 of the 44 schools the multiple-period classes were identified by the names of
the combined subjects. The term "core" was used by nine of the schools. Multiple-period work in many of the schools was identified with English and some form of social studies. In half of the schools the students took one double-period combination taught by one teacher. In 26 of the schools the practice with regard to the assignment of students to multiple-period classes was to require all students in the grades for which multiple-period classes were offered, to enroll in such classes. Some or all of the multiple-period classes in ten of the schools were set up to meet the needs of students in certain ability classifications. The beginning dates of the various programs show a continuing and growing interest in multiple-period work in Wisconsin. Thirty-seven of the 44 programs had come into existence since the middle of the 1940's.

The Teacher in the Multiple-Period Program

Data were secured through individual interviews with 41 teachers engaged in multiple-period programs in 15 of the 44 schools. The 15 schools included five classified as small, four as medium and six as large. The teachers were selected for these interviews by their own administrators who were requested specifically to select teachers representing varying degrees of interest, or lack of interest in multiple-period work.

Thirty-three of the teachers had received their collegiate training in the secondary social studies area, seven in the elementary social studies field and one in secondary science and mathematics. There was a wide variation both in the total number of years of teaching experience and in the years of experience with the multiple-period program. The size of the classes with which the 41 teachers worked ran from the smallest with 17 pupils to the largest with 34 pupils. The average size class consisted of 26 pupils.

The teachers interviewed saw value in multiple-period classes. They felt particularly that this organization helped to establish closer personal relations between students and teachers. In large and medium schools where impersonal relationships are more likely to prevail, this would seem to be an especially important result of the multiple-period program. Teachers in the small schools also stressed the role which such organization plays in helping the class to become more closely identified with the school-community relationship. There was some expression on the part of the teachers to the effect that they had not been helped to see clearly the basic objectives of multiple-period organization. This points to the need for in-service education opportunities which might be developed in local school systems and in teacher-education institutions.

The Student in the Multiple-Period Classes

Two hundred thirty-nine students in five high schools were asked to express opinions on their multiple-period classes. Every one of the 239 students to whom the questionnaires were given was enrolled in only one multiple-period class and this was also the first experience for each of these students in such classes.

The general picture within the group of 239 students was one of approval for
multiple-period class organization. Eighty-seven percent of the students included in the questionnaire study said that they liked the multiple-period classes in which they were enrolled. A smaller majority indicated that they liked their multiple-period class better than any other classes. Enthusiasm was reflected on the part of the majority of the students for what they were learning in their multiple-period classes. Most students felt they were learning something they could use every day. A slight majority expressed the opinion that they were working harder in their multiple-period classes than in other classes. Just over half of the students indicated that they believed that the parents looked with approval upon the multiple-period organization. Only about one fourth of the students made any statement about the opinions held by other teachers in their school concerning the multiple-period classes. Most of the students responding felt that their other teachers thought such classes were worth while. A slight majority felt that their classmates thought the multiple-period classes were worth while.

**Future Directions and Needs**

In 14 cases evaluation programs specifically directed at the multiple-period programs were reported, while in 13 instances the evaluation programs were those employed in the over-all educational programs rather than specifically developed for the multiple-period programs. The absence of attention to evaluation was reported in twelve cases. In several instances administrators indicated marked concern about a need for development of substantial evaluation programs. Seventeen schools reported plans to continue the existing multiple-period programs, while 16 schools indicated intention of expanding the programs by adding additional sections within the grade levels where the program was in operation, experimenting with other subject combinations, or extending the program to other grades. Thirty schools identified problems related to their multiple-period programs. These were problems which were deemed of sufficient importance to merit special study and included improvement of evaluation procedures, the development of resource materials, techniques for developing and improving multiple-period classes, follow-up studies of graduates, techniques for improving staff curriculum planning, and techniques for improving teacher-parent cooperation.

As previously stated, many of the persons who were interviewed saw value in multiple-period classes. They pointed out, however, that change in classroom organization without a clear understanding of purpose on the part of those concerned would probably result in little actual improvement in the teaching-learning process. In fact, to some of the teachers interviewed it was merely a curricular organization imposed upon them, within which they proceeded as before. This points to the necessity that, if this structure be used, its purposes must be clearly understood.

Those who saw possibilities in the multiple-period structure that they had not seen in their previous types of class organization stated:

1. The multiple-period program helps improve teacher-pupil relationships.
2. It makes for greater flexibility of presentation of subject matter.
3. It makes possible improved school-community relationships.
4. If growth of students is the goal, the multiple-period class organization provides a better medium for "reaching the students."
5. The multiple-period structure provides more opportunity for students to organize their own materials and help develop the goals of the course.

Among other things, the reduction of the teacher-pupil ratio through multiple-period classes helps create a climate for the development of the above-stated values. Furthermore, if this class structure is used in the junior high school, and these values are to be found in the teaching process, the multiple-period classroom organization can help provide more effective transition for students from the elementary to the senior high school levels.

In all of this, it needs to be emphasized that this type of organization takes much more time than other types of class structures, if the above-stated goals are to be reached. The investigators have been impressed, however, by the seriousness with which school personnel have approached their responsibilities in multiple-period organization. They are most earnestly concerned with trying to find means of working with their students to improve the educational offerings of the school, and view the multiple-period organization as a step in this direction.

Those persons interviewed who did not approve of the multiple-period class organization point up the fact that, like any other system, it can be expected to do only that which it is designed to do. The reactions of these persons not approving the multiple-period organization class should be given careful consideration. Personnel in every school that contemplates initiating a plan such as this should also consider its potentialities and weaknesses in the light of its specific local needs. If its use is feasible, careful adaptation to the local situation must be made, if any degree of success in its use is to be found.

In the year following the completion of the study, 30 more schools in Wisconsin introduced the multiple-period structure in their classrooms. This at least indicates a maintenance of interest in the plan, and is hopefully a recognition of possibilities in it for better meeting the educational needs of students in these schools.

If this study is able to shed some light on this involved and somewhat confused subject by the findings which are stated in it, the investigators will count their efforts worth while. It is hoped that the study raises questions which school personnel will need to answer before they can be satisfied with the worth of the plan, rather than looking to it automatically as an answer to age-old problems.

If it does, then this study will help identify a possible function of university research in state-wide curriculum planning. Studies such as this may then help give our youth tools which will enable them to contribute toward the betterment of the communities in which they live.