

to coordinate the efforts of all of the high schools contained in a considerable area. This organization would make it possible to secure a degree of concentration in curricular offerings that will not obtain as long as each high school is independent and striving to offer as many courses as its neighbors. Improvement in roads and means of transportation would make it possible in many instances to combine schools, thus making possible classes large enough for more effective instruction and permitting a wider range of electives where this is desirable. This result is not likely to be secured when each high school is an independent organization.

The lack of experience on the part of rural high school teachers makes it very important that provision be made for a high type of professional supervision. Assistance of this character would more than pay for itself by indicating ways and means of improving the programs of instruction, by planning alterations of subjects and strengthening methods of instruction. This supervision could be economically effected if the efforts of a considerable number of

high schools were coordinated by being included in the same administrative unit.

These considerations have to do only with changes that are necessary if the rural high school is to render the largest service to those who attend. There is a further problem of importance. It is the situation resulting from the failure of farm children to secure the advantages of secondary schooling as generally as do urban youth. Unless it is recognized and remedied it will be a potent force in lowering the character of the rural citizenship of the future.

We face no more serious educational problem than that raised by the adjustment of the rural high school to the needs of its constituency and by the necessity of bringing all rural children within the zone of influence of some high school. It affects curriculum, teaching staff, administrative organization and school support. It is suggested that its solution will offer a way to a practical interpretation of equality of educational opportunity.

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## The Junior High School

**I**N the past decade the junior high school movement has swept the country. The reorganization of the public school system, which is involved in the movement, is commonly known as the 6-3-3 plan, i. e., grades 1-6 of the elementary school, the seventh, eighth and ninth years of the junior high school, and the tenth, eleventh, and twelfth years of the senior high school. Since 1890 educators have been discussing the need for reorganization. The 6-3-3 plan is the outcome of that discussion, study, and research. It has all culminated in the following recommendation by the present Commission on the Reorganization of Secondary Education:

*We recommend a reorganization of the public school system whereby the first six years shall be devoted to elementary education designed to meet the needs of pupils of approximately 6 to 12 years of age; and the second six years to secondary education designed to meet the needs of pupils of approximately 12 to 18 years of age.*

Continuing, the Commission suggested that,

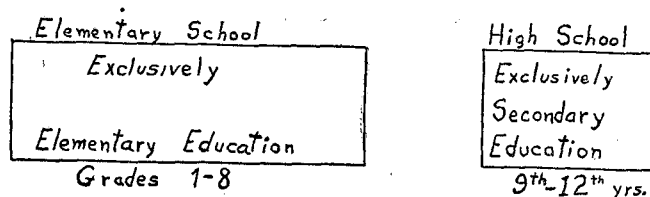
The six years to be devoted to secondary education may well be divided into two periods, which may be designated as the junior and senior periods. In the junior period emphasis should be placed upon the attempt to help the pupil to *explore his own aptitudes* and to make at least provisional choice of the kinds of work to which he will devote himself. In the senior period emphasis should be given to training in the fields thus chosen.\*

These recommendations became the corner-stone in the construction of the 6-3-3 system of public schools.

The chief indictment of an elementary school of eight years and a high school of four years was the lack of articulation between the two. In the long period of twelve years of public school education it was inevitable that distinct aims should control the school at either extreme. But the distinctions were not restricted to the extremes; they grew to permeate the whole period of each unit. There was no intermediate school of transition be-

tween elementary and secondary education. The situation may be graphically represented as follows:—

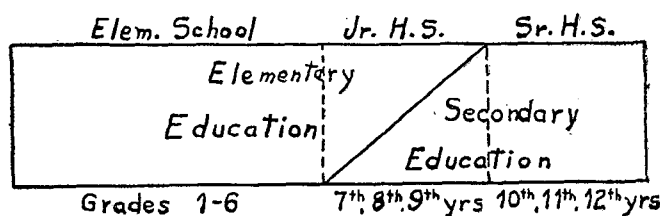
CHART 1



It had been universally conceded that there was a waste of time in an elementary school of eight years and a lack of time in a secondary school of four years. One result of an articulated school system and of a period of marking time in the upper grades of a grammar school was strikingly revealed in 1905 by two national surveys of school eliminations. It was discovered that for the country as a whole nearly 60 of every 100 pupils who completed the sixth year were lost to the public school during the seventh, eighth, and ninth years.

Some constructive plan of reorganization to remedy such wholesale educational waste was imperative. A new school unit of gradual transition between elementary and secondary education was created. It placed under a new school administration the seventh and eighth years of the former elementary school and the first year of the high school. It became the intermediate school, or as it was more generally designated, the junior high school. It readjusted the twelve years of the school system into an articulated whole which may be illustrated as below:

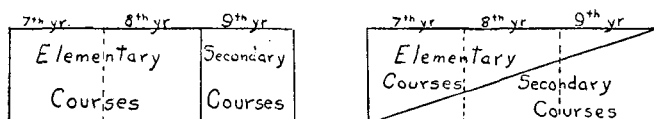
CHART 2



\* Cardinal Principles of Secondary Education, Bulletin 35, Government Printing Office, Washington.

However, the junior high school is more than a mere readjustment of grades. Basically it is a "chemical product, not a physical combination." It began over a decade ago as an administrative problem of a new combination of grades. It has become a fundamental problem of educational reconstruction. The distinction will be evident in the following diagrams:

CHART 3



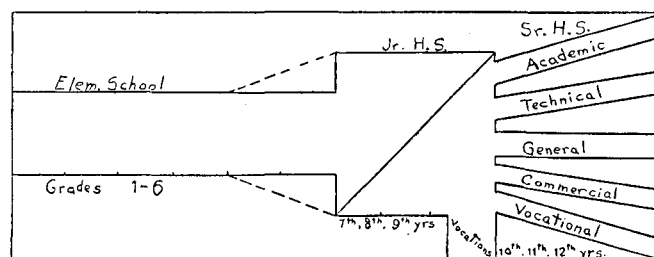
The first diagram represents a readjustment of grades 7, 8, and 9 into a new school but with unaltered courses of study. This is merely a physical combination with no purpose to articulate elementary and secondary courses of study. It is not today recognized as a junior high school whose primary purpose is to become an intermediate school of gradual transition between elementary and secondary education.

The second diagram shows a basic change in direction of the line of separation between elementary and secondary courses of study. Formerly a vertical line had been drawn to result in a wall of obstruction over which few pupils successfully vaulted. The diagonal line provides a gradual and natural transition from elementary to secondary courses of study.

One example will illustrate: in mathematics the former practice was to offer exclusive arithmetic in grades 7 and 8 and exclusive algebra in the ninth year. The change from the vertical to the diagonal line makes it possible to continue arithmetic through the three years of the junior high school and simultaneously to articulate it with intuitive or observational geometry and elementary algebra. The result is a chemical product, a new course of study for the junior high school, designated as general mathematics. This new course eliminates even the diagonal line of separation between elementary and secondary mathematics. It is a basic educational reconstruction. It has one and only one justification, which, however, wholly justifies it, i. e., it articulates elementary and secondary mathematics solely in the interests of early adolescent children who during the transitional period of the junior high school must make the shift from elementary to secondary mathematics and who can do so more readily through the articulation of arithmetic, intuitive geometry, and elementary algebra than through the former abrupt transition from exclusive arithmetic to exclusive algebra.

Similarly, other secondary courses of general science, foreign languages, commercial courses, prevocational courses in practical arts, general social science, fine arts, and technical education are introduced into the program of studies of the junior high school. This articulation of elementary and secondary courses of study is a basic educational reform. It is the distinctive characteristic of the junior high school of today. It goes to the root of the weakness of the former 8-4 plan and provides the remedy by bringing to the public school system an orderly, progressive, and natural transition from elementary to secondary education.

The relation of the functions of the three schools in the 6-3-3 plan may be seen in the following chart:

CHART 4  
The 6-3-3 Plan

There is a single curriculum of common branches in the six years of the elementary school. Its function is to give the tools of education and the command of fundamentals essential to further progress either educationally or vocationally.

There is an enlarged and enriched curriculum in the three years of the junior high school. Its function is to articulate elementary and secondary courses of study; thereby, to help each early adolescent to discover his own peculiar aptitudes by a general survey of the types of differentiated educational curricula ahead of him; to reveal to him the educational possibilities for the training of his aptitudes; and to give him, through its guidance program, a vision of the opportunities in which his aptitudes when discovered and trained may find their proper and useful employment.

There are multiple or differentiated curricula in the senior high school. Their function is to furnish training for "the aptitudes, interests, and capacities"\* of pupils previously revealed in the junior high school. The channels of this training are the differentiated curricula—academic, technical, general, commercial, and vocational.

The point of view of the elementary school toward its pupils is en masse to the end that all may receive a usable knowledge of the common branches and a sympathetic understanding of the social and civic structure of our democratic society.

The point of view of the senior high school is the group, to the end that the pupils of each group may receive specialized training in the curriculum they have chosen.

The point of view of the junior high school is the individual, to the end that each pupil may be selected from the mass and be placed, not blindly and capriciously, but intelligently in his proper group.

The junior high school has been variously entitled as the finding, the sorting, the trying-out, and testing period of the public school system. It is a probationary period before the vital question of educational or vocational choice is finally determined. Exploration of individual differences, the revelation of educational and vocational opportunities adaptable to individual differences, guidance of educational or vocational choice, equalization of opportunities, the adaptation of educational offerings to ascertained individual needs rather than the conforming of all pupils to one educational pattern, and the stimulation of educational or vocational vision which conditions all progress in secondary education,—all these and other purposes to adapt the educational program to the "individual" are the objectives of the junior high school.

The nature of junior high school administration is *gradual transition* from elementary to secondary education.

\* Thomas H. Briggs, *The Junior High School*, page 26, Houghton, Mifflin Company.