

test on multiplication combinations was given. Each child added another bar to his graph and noted his growth. Instead of one child competing with another, each one competed with his own previous record. Emphasis was placed on the greatest growth instead of the highest score. The papers were again analyzed and the children were re-grouped. We continued working in this way until a few children could give automatic responses to all of the multiplication facts including the form  $4x? = 8$  which we expected to use in bridging the gap for division. As each child learned his multiplication facts he was given his fifteen minutes for working on some individual problem such as skipping one or more decades when adding, forgetting to carry, counting instead of using combinations, and confusing zeros in subtraction with those in multiplication. When practically everyone knew all of the multiplication facts, we began working short division, instruction proceeding by steps of difficulty.

When all of the fundamental processes had been taught, the children took a general test. This time they analyzed their own papers and each child decided which process he needed to work on most. After the decision was made the children were divided into four groups with a child acting as leader in each group. A test was given about every three days. Some of the children looked through sample arithmetics for the kind of examples they needed to work on, others made up examples and solved them, while those who were poorest frequently solicited help from their classmates during free period and at recess. Interest continued to grow until it reached its height one day when they insisted on working arithmetic examples the whole afternoon. However, this never occurred again. We usually studied arithmetic about fifteen minutes in the morning and thirty minutes in the afternoon. This intense interest was the result of knowledge of rapid growth. Effect, the third law of learning, gave so much satis-

faction that there was a readiness for more exercise.

On the eighteenth of May, when Form B of the Pittsburgh Arithmetic Scale was given, the median of the class was a little above the standard for grade 5B. The scores for this test are represented by the black bar. The achievement of the class had been due largely to attacking the work in a systematic way, keeping in mind psychological principles, and applying the laws of learning.

RUTH M. HOLMES.

### THE HIGH SCHOOL LIBRARY

**A**LACK of adequate financial support is the greatest handicap of the American high-school library, according to the National Survey of Secondary Education in its monograph on *The Secondary School Library*<sup>1</sup> just published by the Government Printing Office. Inadequate facilities are the greatest obstacles to the realization of the aims of school libraries, this report points out in citing the conditions of 390 selected schools in 46 states and the District of Columbia.

"The entire problem of instruction in the use of books and of libraries demands investigation," the report concludes in its summary and appraisal of unsolved problems.

Prepared by B. Lamar Johnson, librarian and dean of instruction at Stephens College, Columbia, Mo., and specialist in secondary administration of the National Survey, this monograph is one of 28 special reports now in process of publication. The National Survey was conducted by authority of Congress under the auspices of the United States Office of Education. Commissioner William John Cooper was director of the Survey and Dr. Leonard V. Koos, professor of secondary education at the University

<sup>1</sup>This monograph is listed as Bulletin, 1932, No. 17, National Survey of Secondary Education, Monograph No. 17, and may be procured from the Superintendent of Documents, Washington, D. C., at 10 cents per copy.

of Chicago, was associate director. However, the major burden of directing and handling the investigation was intrusted to Dr. Koos who is eminent in the field of secondary education and nationally known for his contributions for the improvement of public education. Resulting from a three-year survey, this study, it is emphasized by Carl A. Jessen, co-ordinator and himself specialist in secondary education in the Federal Office, aimed primarily at discovering and studying not the usual but the unusual practices, not the ordinary procedures but the extraordinary ones.

Difficulties listed in realizing the aims of the secondary school library as reported by principals, teacher-librarians, and librarians are as follows: Of a total of 281 reporting, 154 set up inadequate facilities as the greatest obstacle; 85 set up inadequate staff; 29, lack of interest and time on the part of the pupil; 21, lack of co-operation by teaching or administrative staff; and 18 set up as an obstacle the fact that the library is used as a study hall. The other 12 difficulties were of a miscellaneous character including teaching methods in conflict with the use of the library.

The Dewey decimal system of classification was found to be the method of classifying books dominantly used in secondary school libraries.

The results of the investigation and of previous studies are in accord in disclosing that it is the practice of many high schools to employ teachers without library training, assign them full-time teaching loads, and in addition ask them to take charge of the school library.

Instruction in the use of books is given in less than one-third of the high schools. Many high school libraries do not keep records of circulation.

In analyzing the facilities of the library, the report reveals that 330 of the 390 schools studied have separate rooms for their library. In 29 schools the library is housed in the assembly hall and in 15 it is

in a corridor. Housing of school libraries is not limited to reading and book rooms. The librarians of 129 schools have work rooms; 46 schools have conference rooms; 31 report having library classrooms, and 18 have rooms for visual instruction. Most librarians do not approve of having the library and study hall combined.

However, the opinions of the librarians in this respect are comparatively evenly divided. Twenty-two of the 50 librarians and teacher-librarians in the selected schools having the combination plan state that they like this arrangement. Principals are, in general, satisfied with the arrangement which combines the library and the study hall. Having the library and study hall separate and having them connected by a door meets the general approval of teacher-librarians, principals, and librarians alike. Under the combination plan it was found that 85 per cent of the pupils went to the library on a typical day whereas in those schools separating the library and study hall only 41 per cent of the pupils went to the library. Students appear to avail themselves of every type of library activity under the combination plan.

#### *Not Enough Seats*

Junior high school pupils use the school library for pleasure reading more than do senior high school pupils. Many devices have been resorted to by high school librarians to encourage recreational reading. The seating capacities of the libraries appear to be adequate in the smaller high schools, but in the larger schools (especially those enrolling more than 2,000 pupils), the median percentage of the student body which the library can seat is very small.

In a number of schools visited more than 40 per cent of the student body used the school library on the day on which data were collected. High schools use various procedures for admitting students to the library. A number of schools report finding it satisfactory for pupils to go to the li-

brary freely without having their attendance checked at any time.

"The small high school is a particularly difficult situation in which to develop satisfactory library service. The use of the high school library by the public, the use of the high-school library by elementary school pupils, the development of county library systems, and the consolidation of school districts are methods which have been reported as successful in increasing the size of the group which the library in the small high school serves," according to the report.

#### *Many Small Libraries*

Regular instruction in the use of books in the library is given in approximately two-thirds of the schools taking part in this study.

Data indicate that in the schools co-operating in this study the *total* number of books increases consistently with the number of pupils in the school, but that the number of books *per pupil* decreases as the enrolment increases. "The size of the book collection ranges from 116 books in a school with fewer than 50 pupils to 30,000 books in a school with an enrolment of 1,500. Fifty-eight schools (including five with enrolments of more than 750) have fewer than 1,000 books in their libraries."

The median number of magazines in the libraries participating in this study increases from 6 in schools with enrolments of fewer than 100 to 42 in schools enrolling more than 2,000 pupils. Of the schools reporting, only 7 did not subscribe for a magazine.

A median number of two newspapers is subscribed for by the libraries in 331 schools. No relation appears to exist between the number of newspapers subscribed for and the enrolment. It was found that 71 libraries do not subscribe for newspapers. This is in sharp contrast to the emphasis placed upon magazines.

#### *Recommendations*

Many schools have full-time librarians who are college graduates and who have

had professional training in library science. The report indicates, however, that most of the smaller schools employ teacher-librarians. In a number of these schools the teacher-librarians have had library training and at the same time their teaching loads are reduced so that they may devote a major portion of their time to library work.

Among 10 outstanding recommendations which conclude the report of Dr. Johnson are the following: (1) A need for both extensive and intensive study of library standards which have been set up by states and other school accrediting bodies; (2) extensive study to determine the effect of newer methods of classroom teaching on the use of the secondary school library; (3) a series of studies to appraise the methods of encouraging recreational reading; (4) a study of the effect which regularly scheduled free reading has on the pupils' recreational reading habits; (5) continued study of the relation of the library to the study hall; (6) an investigation of co-operation between school and public libraries; (7) further inquiry into methods of selecting books for the high school library; (8) investigation of the entire problem of instruction in the use of books and of libraries; (9) careful investigation of training secondary school librarians; (10) and continued study of outstanding practices, devices, and procedures successfully used in outstanding secondary school libraries.

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#### SOUNDS

A rooster that crows in the morning  
Of a Sunday still and bright  
Has a lonely sound, but lonelier  
Is a train that whistles at night.

—EDNA TUTT FREDERIKSON

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You cannot dream yourself into a character; you must hammer and forge yourself into one.—*Jeremy Taylor*.

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Beauty lives with kindness.—*Shakespeare*.