R E P O R T R E S U M E S

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VISION AND HEARING SCREENING IN THE CHAMPAIGN COMMUNITY SCHOOLS, A FIVE YEAR REPORT, 1959-60 TO 1963-64.

CHAMPAIGN COMMUNITY UNIT 4 SCHOOL DISTRICT, ILL.

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DESCRIPTORS- *EXCEPTIONAL CHILD SERVICES, *TESTS, *VISUALLY HANDICAPPED, *AURALLY HANDICAPPED, *IDENTIFICATION, TESTING PROGRAMS, SCREENING TESTS, VISION TESTS, AUDIOMETRIC TESTS, ADOLESCENTS, AUDITORY EVALUATION, CHILDREN, HARD OF HEARING, PREVENTION, PUBLIC SCHOOLS, RECORDS (FORMS), REFERRAL, SCHOOL COMMUNITY PROGRAMS, CHAMPAIGN COMMUNITY SCHOOLS,

THIS IS A 5-YEAR REPORT OF THE VISION AND HEARING SCREENING PROGRAM CONDUCTED ON CHAMPAIGN COMMUNITY SCHOOL CHILDREN IN GRADES 1, 4, 7, AND 10. A REVIEW OF CURRENT PRACTICES AND RESEARCH IN HEARING SCREENING INCLUDES STUDIES ON TEACHER REFERRAL, GROUP AUDIOMETRY, LIMITED PURE TONE SWEEP, AND INDIVIDUAL SCREENING TESTS. THE TESTERS, EQUIPMENT, CHILDREN TESTED, TESTING CONDITIONS AND PROCEDURES, AND REFERRAL LETTER ARE DISCUSSED. RESULTS OF THE HEARING SCREENING ARE DESCRIBED AND PRESENTED IN TABLES. EDUCATIONAL IMPLICATIONS, SUCH AS PREFERENTIAL SEATING IN THE CLASSROOM, ARE EVALUATED. THE VISION SCREENING PROGRAMS, EQUIPMENT USED, TESTERS, TESTING, RECORD KEEPING, AND FOLLOW-UP PROCEDURES ARE DISCUSSED. VARIOUS RESEARCH STUDIES RELATED TO VISION SCREENING, SUCH AS THE 1948 ST. LOUIS STUDY, THE 1956-57 BOSTON STUDY, THE SOUTH CAROLINA PROGRAM, PRESCHOOL SCREENING IN OREGON, AND SCREENING PROGRAMS IN ROCKFORD (ILLINOIS) AND MARYLAND ARE DESCRIBED. THE 5-YEAR CHAMPAIGN (ILLINOIS) PROGRAM IS DESCRIBED IN TERMS OF PROCEDURES, FOLLOW-UP, AND RESULTS. DATA ARE PRESENTED IN TABLE FORM. THE APPENDIX INCLUDES SAMPLE RECORD AND REPORT FORMS. A BIBLIOGRAPHY CONTAINS 27 REFERENCES. (RS)

VISION & HEARING SCREENING

IN THE

CHAMPAIGN COMMUNITY SCHOOLS

1959-1960 - 1963-1964

E. H. Mallon
Superintendent of Schools
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Champaign, Illinois

HEARING AND VISION SCREENING
Of The
CHAMPAIGN COMMUNITY SCHOOLS

A Five Year Report
1959-60 to 1963-64

ACKNOWLEDGMENTS

The effective operation of the vision and hearing screening program is the result of the higher order of cooperation among school personnel, parents, members of the medical profession, and community volunteers.

We wish to express our sincere appreciation for the consultative service provided by Dr. E. Thayer Curry, University of Illinois Hearing Center, and Dr. John J. O'Neill, Director, University of Illinois Speech and Hearing Center, which has been invaluable in not only initiating the hearing screening program but also in improving the program each successive year. For this demonstration of interest and support of the program we are most grateful.

Our thanks are extended to the following medical specialists appointed by the County Medical Association to serve as an advisory board to schools relative to the vision and hearing screening program: Dr. Frank Kresca, Dr. William Youngerman, Dr. James Walker, Dr. E.C. Albers, Dr. Louis Kent, and Dr. Benjamin Robinson. Special thanks are extended to Dr. Kent who spent considerable time discussing specific problems of vision screening with the coordinator of the program.

Without the help of the following community volunteers the vision screening would not be possible: Mrs. George Anderson, Mrs. Wayne Bever, Mrs. E.W. Grant, Mrs. C.D. Huddlestone, Mrs. Donald Jackson, Mrs. Van C. Norman, Mrs. Robert Oldland, Mrs. William H. Smith, Mrs. Albert Mercer, Mrs. Gene Wilder, Mrs. George Sears, Mrs. Frank Schooley, Mrs. Kyle Robeson, Mrs. Jack E. Moore, Mrs. Arthur Bolz, Mrs. J.W. Reeder, Mrs. Amy Eichelberger, Mrs. Joseph Gusfield, and Mrs. Sally Gibson.

The Health Council of the Champaign Schools whose membership is comprised of staff members, medical specialists, and parents has been responsible for not only the instigation of the screening programs but has given valuable advise regarding ways of improving various aspects of the screening programs. Recommendations for improvements have also been solicited from administrators and other staff members, from hearing and vision specialists, and from the volunteers who participated in the screening programs.

The encouragement and support of the Board of Education and the Superintendent of Schools, Dr. E.H. Mellon, in initiating and operating these improved vision and hearing screening programs reflects the outstanding leadership in the Champaign Schools.

The cooperation of the nurses of the Public Health Department and of the county nurses in assisting in the follow-up has added markedly to the most important aspect of the program. To identify children who need to be seen by specialists is an important step but more important still is the actual referral of such cases to specialists. In a percentage of cases, it is necessary to confer directly with parents in a one-to-one relationship to obtain their cooperation in taking their child to a specialist.

Mr. John B. Weaver, Coordinator, has demonstrated outstanding leadership in organizing and conducting the hearing and vision screening in the Champaign Schools. He recognizes the importance of interpreting the program in the school and community to gain the needed understanding and support and has developed ways and means of bringing about this understanding and support. He also has the ability to work effectively with personnel in the schools, specialists in the community, parents, and volunteers which is crucial in effectively and efficiently operating the screening programs.

The following report, written by Mr. Weaver, reviews the literature and research on hearing and vision screening programs, presents in some detail the procedure, instruments, and results of the Champaign screening program. Mr. Weaver has analyzed and presented some interesting findings relative to the five years these screening programs have been in existence under his leadership. In the summary and conclusions you will note that the strengths and weaknesses of both the hearing and vision programs are delineated.

Merle B. Karnes
Director of Special Services

HEARING SCREENING

Introduction

A basic need in the area of hearing disorders is the need to rapidly and efficiently identify those individuals who have a hearing deficiency. Once these individuals are identified attention should be directed toward their receiving medical and educational assistance whenever indicated.

Hearing conservation programs vary from school system to school system in their scope, their organization and their goals. Some schools provide nothing in the area of hearing testing while others solicit the services of the medical profession to provide immediate follow-up otological examinations for those who indicate the need. A few factors underlying the extent and the variance in such programs are financial assistance for the program, public and administrative interest, qualified personnel, testing equipment and community support. While school systems and communities are cognizant of the need for such programs, they are often reluctant to establish such. It is often felt that the problems encountered in such an undertaking are of greater magnitude than the benefits derived from the program.

The obvious result of a poor screening program or the lack of a hearing screening program is undetected hearing disorders in young children. Some hearing problems may be slight and may not progress in severity through the school years, or may be of such a nature that they respond immediately to medical treatment. Other hearing problems may progress slightly and as they do the individual makes compensations for his gradual but increasing loss of hearing. Still others may have hearing problems of a more severe and permanent nature. Too often, however, the parent and/or teacher are more ready to accept the child as being "slow" than they are ready to inquire about the child's hearing acuity.

Early detection of children with hearing defects is realized through hearing screening programs. Once this is accepted the problem then becomes one of selecting equipment and establishing procedures to be utilized for the identification of the "medically significant" hearing loss.

Review of Current Practices and Research

In reviewing the literature the following information appears to be pertinent in planning a hearing screening program.

- Teacher Referral

Curry (1950) incorporated the efficiency of teacher referral in the hearing survey conducted in DeWitt-Piatt County in 1948-49. He found that the efficiency of teacher referral of children with medically significant hearing losses was but twice as good as chance. Teachers referred only 7.4% of the total number of children found to have a hearing deficiency. On the basis of the results, Curry concluded that teacher referral of children with medically significant losses is not an efficient means of identification. He recommends identification of hard-of-hearing children be done by audiometric examination and not by a system of teacher referral.

In a later study, Curry (1954) found the efficiency of teacher referral varied in relation to grade. The teachers were best able to identify hearing loss problems of pupils in grades four, six and eight. They exhibited a much greater ability to identify hearing loss in these three grades than in the lower grades; first, second and third; or in the upper, ten, eleven and twelve. While Curry reported that approximately one out of four hearing loss cases was correctly identified by the classroom teacher, Kodman (1956) reported correct teacher identification of only one out of six. The authors are in agreement on the inefficiency of teacher referral as a method of identifying children with hearing problems.

- Group Audiometry

The primary advantage of the group test is in the number of children who can be tested by a single tester with a minimum of training. The most common disadvantage of the group test is that it may sacrifice accuracy of testing in the attempt to cover a wider population. Inasmuch as the primary purpose of any hearing test is to discover cases of hearing impairment, a test that does not perform this function satisfactorily is a poor instrument.

Harris (1945) attempted to correlate an individual or group retest situation with the initial group test scores. He concluded that deviations from group individual tests to group-group tests were insignificant and it made little difference if the second test was group or individual. Harris had a considerable advantage over a public school screening situation in that his tests were performed in a sound proof room using trained "selected listeners" who had normal hearing.

Newby (1959) in order to test the efficiency of the group tests draws upon a sampling of 100 children tested both by group and individual method. The children are third and fourth graders. As a result of the individual tests eight children are known to have a medically significant hearing loss which indicates 92% have essentially normal hearing. Using the criterion of a 20db loss at any two frequencies as failing the test, the group test reveals only four of the eight children (50%) with significant hearing losses. Using the same criterion, eight children would be needlessly retested. The total correctly identified by the group test in this situation was 88%.

By grading the papers more strictly, the group test would identify seven of the eight children with significant hearing loss. However, in this case fourteen children would be needlessly retested and the percentage correctly identified would be reduced to 75%.

Many school systems today still use the group screening methods. However, most group tests continue to over-refer, while they fail to identify all children with medically significant hearing losses. Curry and Nagle (1959) analyzed the results of group tests followed by complete threshold tests in relation to several factors. They concluded that the unsatisfactory performance of the group tests used with an ear choice technique could not be attributed to any particular age, school, grade or test frequency acuity characteristic of the subjects.

- Limited Pure Tone Sweep

Copenhaver and Campanelli (1959) in comparing the use of the single frequency of 4000 cps for sweep checks found only 64.8% of those failing the individual tests would have been identified. The use of 1000, 4000, 6000, and 8000 cps would have identified 96.4% of those identified in the individual tests.

Bella and Miller (1958) found that 61.9% of children with significant hearing impairment would not have been detected if testing had been limited to 4000 cps. If testing had included 2000 cps as well as 4000 cps, 54% of the children with hearing losses would not have been detected.

Sidgenthaler (1959) found, by examining audiograms of school children, that a test including 4000 cps and 5000 cps would catch from 83% to 93% of the medically significant hearing losses. Though a two frequency test seems to be better than the single frequency, it still appears it would miss as many as 7% of the children with medically significant hearing losses.

Ventry and Newby (1959) spot checked every fourth child in a group of 1,517 tested by individual audiometry. Their statistical analysis indicated the mean threshold loss at 4000 cps was greater than the mean threshold loss at any other frequency tested. Though they felt the validity of the single frequency principle was established in this one study, they recommended further evaluation.

Miller and Bella (1959) using 3,630 school children as subjects concluded that the audiometric frequency showing the greatest loss was not 4000 cps in a large portion of the losses found. Further, that testing limited to 2000 cps and 4000 cps will fail to detect a significant number of children with losses of hearing. Though they feel a three frequency test may be as significant as the complete test, they feel the time saved would probably be negligible.

- Individual Screening Tests

In the individual sweep test method the subject receives the presentation of six different pure tones (250, 500, 1000, 2000, 4000, and 8000 cps) at a sound pressure level considered to be in the range of "essentially normal" hearing. In the sweep test the tester is interested in knowing only whether or not a given pupil can hear at the screening level. If the pupil does not respond at any one of the frequencies screened he fails the sweep test and must be retested later with an individual threshold test. (Newby, 1959)

The literature points toward the individual testing method using the sweep and follow-up threshold test as that which is to be desired. The studies, for the most part, relate to the group methods and abbreviated sweep methods as attempting to be as efficient as the individual testing situation.

The Champaign Hearing Screening Program

The Champaign Community Schools initiated a hearing screening program in the school year of 1959-60. In so doing, the individual sweep test method followed by the individual threshold test was employed. This procedure utilized a variation of ear choice technique as reported by Curry and Kurtzrock (1951). The screening program itself was a result of planning done by the Champaign Schools Health Council, the Champaign County Medical Association, the University of Illinois Hearing Center, an advisory board of otologists appointed by the County Medical Association, the Office of Public Health, the Superintendent of Schools, and the Director of Special Services.

The forms used, the referral procedures and the procedures for follow-up were approved by the advisory board of otologists. They also approved the following standard for referral as proposed by the committee on hearing conservation of the American Academy of Ophthalmology and Otoloaryngology: any loss of 20 db or more at any two frequencies in either ear or a loss of 30 db or more at any single frequency in either ear is considered to be a medically significant hearing loss.

- Testers

In the hearing screening program in the Champaign Schools, the speech correctionists employed by the schools and volunteers from the University of Illinois Hearing Center administered the hearing tests. All of the testers were experienced in the use of the audiometer and in audiometric examinations. While graduate students in speech and hearing were often utilized, so , too, was the director of the hearing center and his staff members.

- Equipment

An important factor to consider in any screening program is the equipment used and the operating condition of the equipment. This is of particular significance when considering a hearing screening program for an audiometer which is not in calibration will not provide an accurate test. As a result of uncalibrated equipment any number of children may be over-referred. Still again some children may be missed as a result of poor equipment. The end result is obviously unreliable data which is of little worth.

Eight audiometers have been utilized in the hearing screening program in the Champaign Community Schools. Four of the audiometers are property of the Champaign Schools while the remaining four have belonged to the University of Illinois Hearing Center and the Rantoul Public School System. All of the equipment used has been new or recently calibrated. The equipment belonging to the Champaign Schools has been calibrated yearly and that belonging to cooperating agencies is also in excellent operating condition.

- Testing Conditions

Testing conditions are factors which are not as easily controlled as some of the above stated. They not only vary from school to school, but also within the school. This is a factor which must be considered when conducting hearing

tests. In our situation a record was made of unsuitable testing conditions and the child was given the benefit of the doubt on a test administered under such conditions. A recheck of his hearing was scheduled for a later date if he indicated a medically significant hearing loss on the first test.

- Children Tested

In a thorough hearing conservation program all children should be tested every year. However, most public school systems do not have the facilities nor the time to allot to such a procedure. When such is not workable it is recommended that the children receive such hearing tests every three to four years. In the Champaign hearing screening program, all first, fourth, seventh and tenth graders were tested. Also tested were those pupils who were new to the school system and teacher and/or parent referrals.

- Planning and Procedures

Prior to the testing in the schools, possible testing time and testing locations were discussed with each principal. Also, at this time, anticipated enrollment in the above stated grades was discussed in an attempt to determine the number of testers necessary to complete the testing in that particular building in a limited amount of time. Schedules and audiogram blanks were sent to the buildings and it was requested the forms be completed prior to the testing. At the junior and senior high school levels each child was asked to complete the information requested on the individual test sheet. The child then carried the test sheet with him to the testing station. However, in the elementary schools either the school secretary or the individual classroom teacher completed the forms. The forms were then given to the children as they left the classroom for the testing room and in turn the child presented the form to the tester.

Each child received an individual audiometric sweep check. This incorporates setting the audiometer at a sound pressure level to be considered essentially normal hearing. The tester then instructs the child that he will hear different sounds or tones in the ear phones. Some of the sounds will be in his right ear while some of the same sounds or different sounds may be in the left ear. The child is instructed to point to the ear in which he hears the sound as soon as he hears it. When the child appears to have understood the instructions the ear phones are placed on his ears and the test begun. If the child responds correctly to the presented stimuli at the frequencies of 250 cps, 500 cps, 1000 cps, 2000 cps, 4000 cps and 8000 cps he has passed the sweep check and is considered to have essentially normal hearing. If the child fails the sweep test at any given frequency tested he immediately receives an individual threshold test administered by the same tester.

The individual threshold test consists of attempting to determine where the child is first able to hear the stimulus tone and respond to it. While the sweep check is more concerned with determining the number of children who are able to hear the stimuli presented at the controlled level (considered essentially normal hearing) the threshold test functions to determine how well the child can hear the different frequencies. Further, it determines the particular frequency or frequencies where the individual's hearing is least acute.

At the completion of the hearing screening in all schools, the data was gathered and reviewed. Those who had passed the initial individual sweep

test, and those who had failed the sweep test and passed the follow-up threshold test were considered to have essentially normal hearing. Reports stating such were forwarded to the schools.

- Referral Procedure

If the child indicated a medically significant hearing loss on the first threshold test, he was scheduled for an additional audiometric examination prior to medical referral. The second hearing threshold test was administered by a staff member at the university hearing center, the director of the hearing center or the coordinator of the hearing screening in the Champaign Schools. In all cases throughout the school system the second tests were administered under more ideal testing conditions than the initial tests. This was a direct result of fewer children being tested, fewer testers needed, and therefore greater choice of the limited space available.

If a child had failed the initial hearing sweep test and had indicated a medically significant hearing loss on the individual threshold test but then indicated essentially normal hearing on the second individual threshold test, he was considered to have essentially normal hearing.

Letters were sent to the parents of the children referred for medical follow-up. Included in the letter was a copy of the audiogram and an otological form to be completed by the examining doctor.

- Referral Letter

The referral letter to the parent should be directed toward informing the parent of the child's failure to pass the hearing screening tests. The letter should not attempt to diagnose the failure nor should it imply in any way that the child is hard-of-hearing. Such an implication can only lead to unnecessary anxiety on the part of the parent. Instead, the parent should be told that on the basis of the tests administered the child indicated he could benefit from medical advice concerning his hearing. This procedure should be rigidly adhered to since an implied diagnosis will tend to weaken the value of the screening program and will further be detrimental to the follow-up procedures.

When the referral letters were completed, reports were prepared for the individual schools. The reports included the child's name and grade and his disposition in relation to the hearing screening. The schools were asked to make a record of "essentially normal hearing" for those children who passed the screening. For the most part "normal" or "0" was recorded under "hearing" on the cumulative folder. For the children who were referred for medical follow-up, a report was forwarded to their school for the record. The schools were informed that additional information would be forwarded to them at the time it was received in the office of special services.

Upon receipt of the otological forms from the examining doctors, a summary report of their findings and recommendations was forwarded to the particular school. It was requested that the report be reviewed by the individual teacher and placed in the cumulative folder to become a part of the child's permanent record.

- Results

The following are the five year totals for the hearing screening:

Total tested	17,109
Total passed sweep	14,015
Total failed sweep, passed threshold..	1,413
Total passed recheck threshold	1,036
Total referred	624
Five year percent referral	3.6%

Table I indicates a more thorough breakdown by grade and sex for the five year period. Table II indicates a more thorough breakdown by school and sex for the five year period.

Upon initial examination of the data it appears that over the five year period a total of 624 children were referred for follow-up medical examinations. However, further examination of the data indicates 71 of the children referred in the 1962-63 and 1963-64 school year had been previously referred in preceeding years. Therefore, the total number of children referred might be more accurately reflected by the figure of 553. Of the 553 referred for medical follow-up over the five year period, 432 have consulted doctors concerning their hearing. Initially, a little better than fifty percent of the parents followed through on the recommendation. At this time the percentage of follow-through is 78 percent. All parents have been contacted at least twice and some as many as four times in reference to the follow through. When the parents have not been available to phone contacts by the coordinator of the screening, they have been referred to the public health nurses who in turn have followed up on the cases. Of the 121 who did not follow through, 15 either withdrew from school or moved from the school district. Twenty-five passed additional hearing tests administered in the spring of the year.

The forty children referred to above are either unavailable for further follow-up or indicated on further testing that additional follow-up was not warranted. Excluding this group, 81 remain outstanding. A thorough examination of the 81 outstanding cases indicate the following:

Stated they will follow through	30
Will mention to the family doctor at the time of their physical	5
State they will not follow through	3
Have not been available at the time of telephone calls and/or home calls	43
	81

Through the cooperation of the schools, the parents, the public health and the county health nurses, and the medical profession, the following was realized for those who followed through on the recommendations from the hearing screening:

Hearing was restored to the level considered essentially normal	48
Indicated essentially normal hearing when examined by a doctor	10

Received recommendations for continued medical treatment for existing ear conditions 115

Indicated irreversible hearing losses of varying degrees of severity 106

Were recommended to receive periodic hearing evaluations 112

Received other varying recommendations 30

The following may be considered as educational implications resulting from the hearing screening program.

Received preferential seating in the classroom 122
Placed in the resource room for the hard-of-hearing... 1
Considered for placement in the resource room for the hard-of-hearing 4
Were found to benefit from amplification 8

Table I presents the totals for the four year period. It includes the number of pupils tested at the various grade levels, the number who passed the initial sweep test, the follow-up threshold test or the threshold test administered prior to medical referral. It also includes the total number referred and the percentage of referral at the four major grade levels tested. The referral percentage as indicated is quite low for the first grade children and is in fact lower than the total percentage referred. A theoretical inability of the first grade children to respond to audiometric screening techniques seems of little significance in this hearing survey. It should further be remembered that while the referral percentage is highest at the tenth grade level that this figure includes children previously referred from the screening at lower grade levels. Graph I presents the five year referral percentages for the four major grade levels tested.

- Summary and Conclusions

Representation on the Health Council of the Champaign Schools includes the following: the medical profession, faculty members from the various levels throughout the schools and from the office of special services, the public health office, the schools' administration, the county dental society, the PTA Council, the school lunch program coordinator, the athletic director, and the citizens education council. The plan for improved screening was initiated by the health council. As a result of this action, 17,109 children have received hearing tests over the five year period. Of this number, 624 or 3.6% have been referred for medical follow-up and 78% of these have followed through on the recommendation.

It is felt that the hearing screening program has been beneficial for all concerned, especially the children of the Champaign Schools who have been regularly screened. Seemingly the screening program has made the adults in the community, especially parents, more cognizant of the need for medical attention of their children so far as hearing is concerned. Generally the screening program has received enthusiastic support from school personnel, parents, and lay persons. Support of the community is particularly significant since it was the community representatives who made this program possible through their interest in and their support of the project.

TABLE I

5 YEAR TOTAL BY GRADE	No. of Boys Tested	No. of Girls Tested	TOTAL TESTED	No. Boys Passed Sweep	No. Girls Passed Sweep	TOTAL PASSED SWEEP	No. Boys Failed Sweep; Passed Threshold	No. Girls Failed Sweep; Passed Threshold	TOTAL FAILED SWEEP; PASSED THRESHOLD	No. Boys Passed Recheck	No. Girls Passed Recheck	TOTAL PASSED RECHECK	No. Boys Referred	No. Girls Referred	TOTAL REFERRED
1	2506	2350	4856	2110	1926	4036	178	170	348	139	182	321	74	62	136
2	264	223	487	208	187	395	24	15	39	20	14	34	11	7	18
3	233	211	444	191	182	373	16	0	25	13	15	28	17	6	23
4	1942	1937	3879	1579	1617	3196	174	151	325	117	114	231	68	52	120
5	186	159	345	153	131	284	14	11	25	7	3	10	12	10	22
6	143	151	294	106	120	226	10	20	30	12	10	22	15	1	16
7	1656	1618	3274	1335	1333	2668	157	136	293	85	114	199	79	35	114
8	118	119	237	89	99	188	14	10	24	8	6	14	7	4	11
9	223	228	451	176	200	376	13	9	22	14	14	28	20	5	25
10	1368	1296	2664	1056	1090	2146	149	119	268	78	54	132	85	33	118
11	13	28	41	13	25	38	0	2	2	0	1	1	0	0	0
12	3	20	23	2	16	18	0	1	1	0	1	1	2	2	4
EMH	76	36	112	48	23	71	7	4	11	11	4	15	10	5	15
Kdg.	1	1	2	0	0	0	0	0	0	0	0	0	1	1	2
TOTAL	8732	8377	17109	7066	6949	14015	756	657	1413	504	532	1036	401	223	624

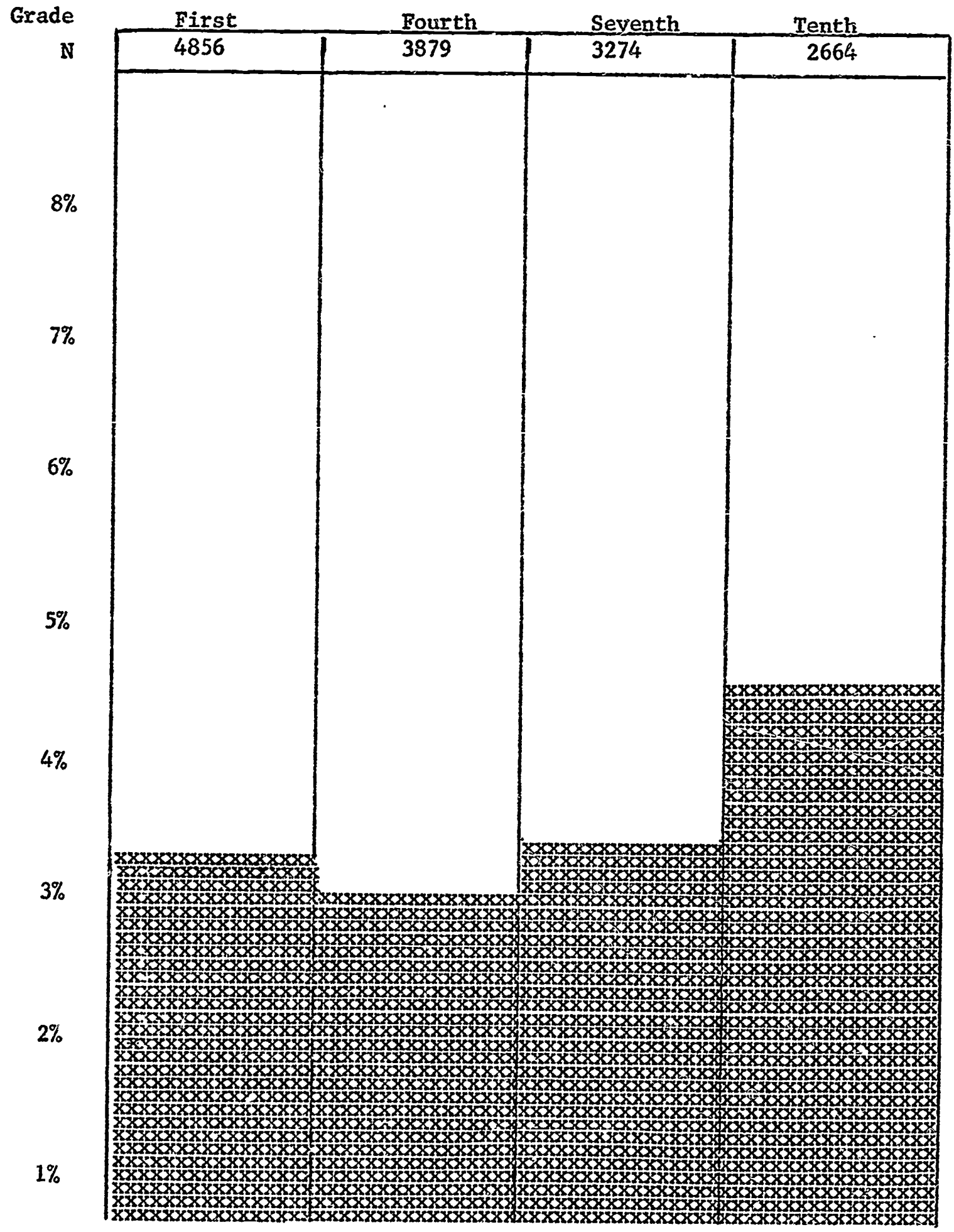
TABLE II

5 YEAR TOTAL BY SCHOOL	No. of Boys Tested	No. of Girls Tested	TOTAL TESTED	No. Boys Passed Sweep	No. Girls Passed Sweep	TOTAL PASSED SWEEP	No. Boys Failed Sweep; Passed Threshold	No. Girls Failed Sweep; Passed Threshold	TOTAL FAILED SWEEP; PASSED THRESHOLD	No. Boys Passed Recheck	No. Girls Passed Recheck	TOTAL PASSED RECHECK	No. Boys Referred	No. Girls Referred	TOTAL REFERRED
Bondville	38	62	100	29	53	82	6	7	13	3	1	4	0	0	0
Bottenfield	513	496	1009	447	432	879	31	27	58	14	25	39	21	12	33
Carrie Busey	514	480	994	423	387	810	51	44	95	24	26	50	14	9	23
Col. Wolfe	144	125	269	116	107	223	11	9	20	11	6	17	6	3	9
Columbia	433	404	837	332	328	660	49	39	88	40	29	69	12	7	19
Dr. Howard	546	492	1038	472	420	892	32	24	56	22	30	52	19	16	35
Garden Hills	484	521	1005	413	433	846	28	39	67	20	29	49	22	19	41
Gregory	196	135	331	154	98	252	15	20	35	20	14	34	7	3	10
Hensley	76	69	145	54	57	111	15	5	20	4	5	9	3	2	5
Lincoln	144	158	302	115	134	249	14	8	22	10	12	22	5	4	9
Marquette	188	177	365	161	149	310	3	10	13	13	13	26	11	5	16
Savoy	147	114	261	118	103	221	15	4	19	8	3	11	6	4	10
South Side	309	341	650	260	262	522	22	36	58	12	26	38	15	17	32
Switzer	404	353	757	299	277	576	40	26	66	41	35	76	24	15	39
Washington	454	448	902	380	365	745	30	34	64	30	36	66	14	13	27
Westview	463	396	859	378	335	713	44	32	76	27	21	48	14	8	22
Willard	10	10	20	9	7	16	1	3	4	0	0	0	1	1	2
Kenwood	78	64	142	67	57	124	4	0	4	3	6	9	4	1	5

TABLE II
(Con't.)

	No. of Boys Tested	No. of Girls Tested	TOTAL TESTED	No. Boys Passed Sweep	No. Girls Passed Sweep	TOTAL PASSED SWEEP	No. Boys Failed Sweep; Passed Threshold	No. Girls Failed Sweep; Passed Threshold	TOTAL FAILED SWEEP; PASSED THRESHOLD	No. Boys Passed Recheck	No. Girls Passed Recheck	TOTAL PASSED RECHECK	No. Boys Referred	No. Girls Referred	TOTAL REFERRED
Edison Junior High	868	860	1728	688	680	1368	79	88	167	51	73	124	50	19	69
Franklin Junior High	792	793	1585	632	690	1322	80	46	126	34	35	69	46	22	68
Jefferson Elem. & Junior High	541	524	1065	447	435	882	36	32	68	39	51	90	18	6	24
Senior High	1389	1356	2745	1072	1140	2212	150	123	273	78	56	134	89	37	126
TOTALS	8732	8377	17109	7066	6949	14015	756	657	1413	504	532	1036	401	223	624

GRAPH 1
Five Year Percentages



VISION SCREENING

It is estimated that approximately 25% of school age children need professional eye care. These visual defects will vary from minor refractive errors to severe abnormalities. Early recognition and treatment of eye diseases and defects can often prevent further loss of vision as well as prevent lasting psychological damage. This fact makes it urgent to establish adequate, systematic vision screening programs in the schools. The results of the vision screening program will be used for the following purposes:

- To refer for proper medical attention all children who have a visual impairment
- To identify for help in special programs those children whose vision, after the best correction, prevents their optimum functioning in the regular classroom
- To recommend to the classroom teachers for special consideration and observation children whose vision is less than normal, but whose loss is not great enough to warrant enrollment in a program for the partially seeing

The important variables in any vision screening program are the people who administer the tests, the instruments used and the use that is made of the results. The most recent and authoritative studies that have been made in these areas as well as expert opinion will be presented and the implications examined.

The Illinois Society for the Prevention of Blindness (1958) advises that there should always be a local committee including representatives of the medical profession to plan the overall local program. It is also suggested that the persons to perform the tests should be carefully selected to insure they have the aptitudes valuable to the screening. Three of the aptitudes are as follows:

1. An understanding of children and how to communicate effectively with them.
2. Enough educational background to understand the scientific approach.
3. Willingness to accept the discipline of a restricted role.

The instrument to be used is also very important and warrants careful selection. There are a number of different instruments available; the following is a description of the most widely used groups of tests.

Snellen Illiterate "E" Chart

Of this chart, Dr. Elton R. Yasuna, M.D., writes, "The Snellen test indicated those children displaying myopias, high refractive errors, and amblyopias due to various causes. It did not detect the hyperopic child, who might be having serious reading difficulties, or muscle defects such as tropias or high phorias." (1952)

Massachusetts Vision Test

This consists of three parts. The first is a measure of distant visual acuity, and a Snellen type illiterate "E" chart is utilized. The second portion of the Massachusetts Vision Test screens for hyperopia. Each eye is tested separately with a pair of spectacles, containing a plus 1.5F sphere in each trial frame. The last portion is for the detection of muscle difficulties. Several different forms of the Massachusetts Vision Test are available commercially. Some of the better known ones are as follows:

a. Massachusetts Vision Test - Welch-Allyn, Inc. Auburn, New York

b. Titmus School Vision Tester - Petersburg, Virginia

c. New York School Vision Tester - Vausch & Lomb Optical Company

d. AO School Vision Screening Test - American Optical Company

Binocular, Stereoscopic Testing Instruments

These instruments screen for distance and near visual acuity, fusion, depth perception, distance and near vertical and horizontal muscle imbalance and color blindness. The most common binocular testing instruments are:

a. The Keystone Telebinocular
b. Ortho-Rater - Bausch & Lomb Company
c. American Optical Sight Screener - Buffalo, N.Y.

Once the screening is completed, one must still determine the best use of the findings. In a survey of the Chicago Schools, an average of 50% of the parents of children who failed the tests and were advised to see the doctor, failed to do so - 38% from the poorer areas and 60% from the more prosperous neighborhoods. In planning the follow-up of the vision screening program, the Illinois Society for the Prevention of Blindness recommends sending to the parents of each child who failes the test forms for the doctor who examines the child to fill out and return to the school or testing agency. This indicates where additional steps must be taken.

Research and Studies Pertaining to Vision Screening

- The St. Louis Study (1948)

In this study, 606 children in first grade and 609 in sixth grade were included; 1,013 were Caucasian and 202 were Negro; 14 different schools were selected in order to give a cross section of socio-economic levels The tests used were the Snellen Chart,(near vision cards, teacher observation), Massachusetts Vision Test, and three types of binocular testing instruments...the Ortho-Rater, the Sight Screener, and the Keystone Telebinocular. All of the children were given each test twice, once by a special technician, and once by the regular nurse. In addition, the test for distance visual acuity was given by the classroom teacher.

Of the 1,215 children tested, 27% were found in need of eye care. For first grade 23% were referred and for sixth grade 31%. Of these 327 children, 249 had refractive errors that could be corrected by glasses, 53 had muscle imbalance, eight had external eye infections, three had internal eye disease, and fourteen needed referral for miscellaneous reasons.

Results:

In general, the school nurses and the special technicians were equally efficient in administering the tests. The only exception was for the Telebinocular where the technicians were significantly superior.

In testing for distance acuity on the Snellen Chart the classroom teachers were equally as efficient as the nurses and technicians.

The three binocular stereoscopic testing batteries gave results so close that there was no referral difference between them in efficiency. Although these tests gave the greatest proportion of correct referrals, they gave an even higher proportion of incorrect referrals, more than 30% of all sixth grade students were found to be unnecessarily referred for optical care by the telebinoculars.

All of the screening instruments missed from seven to eight percent of the children who were proved to need eye care by ophthalmological examination.

- The Boston Study (1956-1957)

A study of uncorrected visual defects among first grade children was designed to determine the reliability, under usual field conditions, of the standardized test of visual acuity administered in public schools in Massachusetts. Included in the study were 377,000 first grade students. The testing instrument used was the Standard Massachusetts Vision Test. Testers were required to record the score on each eye as well as the pass or fail designation. The tests were performed by a team of full-time workers who were recruited from the nursing and teaching profession.

The experiment required that within a few days following an initial examination by regular testers, one "criterion tester" selected by the committee on the basis of experience and apparent competence, examined all first grade students. The criterion tester was not advised of the results of the previous examination.

Results:

Of the total 3,373 students residing in the study area examined by two testers, the first tester failed 214; the criterion tester failed 207. There was agreement on the pass or fail status of 2,312 students; there was disagreement of results of the two tests of 161 students, 5% of the total, who were passed by one and failed by the other. The criterion for passing was 20/40.

To examine the replicability of her own results, the criterion tester examined twice another group of first grade students. There was agreement on passing or failing in 98% of these cases. It appears obvious that the test is significantly more reliable when it is administered by a single examiner than when administered by different examiners.

The low level of replicability in the results of the test has occasioned some speculation as to possible causes of variability. Although a great deal of effort has gone into standardizing the Massachusetts Vision Test in terms of equipment, illumination, procedure and cut-off points, there may be variation in the extent to which prescribed procedure is followed. Perhaps a still greater source of variability is in establishing the necessary relationships between the tester and the young child, so as to ensure the requisite degree of understanding, cooperation, and concentration of attention on the part of the subject. Testers may vary in their ability to establish rapport.

Leverett demonstrated that younger children, when retested, change performance more frequently than older children. Other studies (Uasuna, Green and Benton) have shown that subsequent ophthalmological examination is more likely to substantiate a confirmed Massachusetts Vision Test failure in the older child, than in those in the first two or three grades of school.

- South Carolina Program

The program for vision screening in South Carolina was triggered by the state PTA. Nine counties were invited to participate in the pilot study. The local committees all followed the program outlined by the state whereby the Snellen Chart, combined with careful teacher observation, was the testing instrument; children ages five through 8 were referred if their vision was less than 20/30; older children were referred if their vision was less than 20/20. Volunteers were recruited in each county; eight institutes were held for their instruction. They screened all children who would be entering school the next year in addition to the school children.

At the end of the year reports from the nine counties supplied the following data: A total of 3,406 school age children and 600 of the preschool group were screened; of this number, 1,1300 or 9% were referred for eye examination. Of these, 85% were correct referrals and received needed eye care.

- Preschool Screening in Oregon

Six hundred and ten preschool youngsters were tested in an area which included small metropolitan, rural, and semi-industrial populations. The testing group were volunteers who were given training by ophthalmologists. The following tests were used:

a. Snellen Screening for amblyopia
b. Cover tests for possible squing ("crossed eyes")
c. Pupillary reflection for detection of slight eye deviation or cast

Results:

1. Visual acuity can be determined readily and accurately on nearly all four year olds

2. Mass visual acuity testing of three year olds would probably be inadvisable because of their psychological and physiological non-readiness

3. Screening methods other than Snellen are applicable to most children

4. About 3% of this population have varying degrees of eye muscle imbalance

5. Complete vision screening is obtainable with more confidence and satisfactory results if all above tests are utilized

6. For 98% of the group the study proved their first vision screening or eye examination

7. Vision defects in children under four can be detected by use of these multiple vision screening methods.

- Vision Screening in Rockford

At the end of a two year period Rockford found that 12,000 children had been screened; over 1,000 or approximately 8% of the total enrollment in grades 1, 3, 5, 7, and 9 had been referred for professional care. Ninty-three percent of these needed glasses or had a verified visual problem. Another 2,000 or 14% were found to be already under professional care.

During the third year when they were screening pupils who had been tested two years before, they found 16% were under professional care, an additional 8% were referred. These two percentages make approximately 25% that the National Society for the Prevention of Blindness says may be expected.

Rockford reports good follow-through. They found that 67% of the pupils referred received professional care within a few months after the letter was sent. Nurses contacted the remaining 33% by phone and home visits. Care was provided for those in financial need. This resulted in securing care for a total of 71%.

- Screening in Maryland

Mary T. Thompson describes somewhat of a new approach to vision screening in her description of the system employed in Prince George County, Maryland. Thirteen part-time paid technicians, carefully selected and trained intensively, have carried out both the hearing and vision screening programs in the large school system of 121 public schools with pupil enrollments ranging from 52 to 2,215. Screening was done in grades 1,3,5,8 and 11 plus referrals. Three different type instruments are used, all of which utilize the battery of tests known as the Massachusetts Vision Test.

The vision program was instituted in 1952. They reported that in 1956 the percent of follow-up had risen from 32% in 1952 to 62% in 1955-56.

- The Champaign, Illinois Vision Screening Program

Plans for the revision of the hearing and vision screening were studied by the School Health Council during the school year of 1958-1959. At the close of the year, definite recommendations for improvement of the vision and hearing screening programs were presented to the Superintendent of Schools. The plans were approved by the Superintendent and Board of Education to become effective the fall of 1959. Additional plans were discussed

with representatives from the Office of Public Health. An Ophthalmological advisory board was requested from the Champaign County Medical Association. The Illinois Society for the Prevention of Blindness was also contacted.

While consulting with the Illinois Society for the Prevention of Blindness, equipment approved by them for vision screening in the public schools was examined. Though the equipment is made available, the ISPB makes no definite recommendation concerning a particular manufactured screener. The final selection of the equipment is the responsibility of the local school district. Additional meetings included the medical advisory committee and school administrators Further consultation was also obtained from the Illinois Society for the Prevention of Blindness. Through these meetings, it was determined that aspects of our proposed plan were not in agreement with the policy of the Illinois Society for the Prevention of Blindness and, therefore, additional assistance from their agency would not be available. The Illinois Society for the Prevention of Blindness advocates that an advisory board be made up of certified optometrists as well as ophthalmologists. This was not in accord with the thinking of the County Medical Society.

The chairman of the medical advisory board and a subcommittee from the Health Council met to discuss the selection of equipment. It was agreed that the Titmus Vision Tester was an adequate instrument for vision testing and should be recommended for use in the screening of vision. This recommendation was presented to and accepted by the School Health Council.

Equipment:

Two Titmus Vision Testers were purchased by the Champaign Community Schools at the start of the program. As the population to be tested increased the need for an additional testing machine became obvious and consequently a third machine was purchased at the end of the 1963-1964 school year. The Titmus Vision Tester is a compact instrument easily portable, and requires no special lighting for distance or efficient operation. It is one of the machines approved by the Illinois Society for the Prevention of Blindness. It may be used for testing acuity (right eye and left eye); farsightedness (right eye and left eye); eye muscle balance (far vision and near vision). Slides may be added which will provide tests for depth perception and color blindness.

Testers:

For the initial year of the vision screening program seventeen community volunteers were instructed in the use of the vision screener by the ophthalmologists and coordinator of the vision screening. A nucleus of the original group has been maintained which has served to assist new volunteers as well as to provide competent testing. All volunteers have devoted at least one and in some cases as many as three full days per week to the vision screening program. While the initial year necessitated numerous organizational meetings with the volunteers continuing years have warranted one organizational meeting along with instructional meetings.

Testing Procedures:

The children in the first, fourth, seventh and tenth grades received vision tests. Also tested were children who were new to the school system and teacher referrals. Children who wore glasses or were under doctor's care for their eyes were not tested.

Teachers of children in the first grade were requested to instruct the children in the response procedure. The children were again instructed in the procedure by the tester prior to taking the test. If the child's responses indicated a misunderstanding of the instructions, he was again instructed and retested. The child received all parts of the test regardless of whether he failed the initial part of the test.

If a child responded in such a way that the tester felt his referral was questionable, this was indicated on his score sheet and the child was tested again by a different tester.

Record Keeping Procedures:

Upon the completion of the tests in a given school, forms were returned to the Office of Special Services and placed in varying categories. While no record of the individual children who passed the test was kept in the Office of Special Services, the number of children who passed, failed or wore glasses at the various grade levels in each school was recorded. Following this, all test sheets of the children who passed the vision screening were returned to the particular school with a request that a statement be made on the child's cumulative folder which would indicate he passed the vision screening on that particular date.

If a child failed the vision screening a statement of this effect was forwarded to the school with the request that this be recorded on the cumulative folder. The test sheet containing pertinent information was also filed in the office of the coordinator of the vision and hearing screening.

Follow-up Procedure:

Letters were sent to the parents of the children who failed the vision screening tests. The letter stated the child had indicated he could benefit from seeing the eye doctor of his choice. A form was enclosed with the letter and the parents were requested to have the form completed by the examining doctor and returned to the Office of Special Services. When the completed forms were returned they were reviewed by the Coordinator of the Vision and Hearing Screening. On the basis of the report received from the examining doctor, an additional summary report of the findings were prepared in the Office of Special Services and forwarded to the schools to be reviewed by the classroom teacher and placed in the child's cumulative folder.

The forms used in the last four years of the program requested information pertaining to the correction prescribed. Request for this information was added to the report form at the recommendation of the teachers of the partially sighted. It was felt that this information would be beneficial in determining the educational implications of the existing visual deficiency.

Letters which included similar forms used for children failing the vision screening were sent to the parents of the children who wore glasses or were under doctor's care for their eyes. The receipt of this information is of assistance to the regular classroom teacher and is of further benefit in cases where conditions were uncorrectable or are not correctable to an essentially normal range of vision. In the later case the child might be eligible for placement in the program for the partially seeing.

Results of the Vision Screening:

	1959-60	1960-61	1961-62	1962-63	1963-64
Total Tested	2,516	2,647	2,825	2,947	2,881
Total Referred	443	312	297	338	338
Percent Referred	17%	11.8%	11.7%	11.4%	11.7%
Grade					
Kindergarten	---	---	---	2	2
First	109	87	59	69	90
Second	13	4	8	7	9
Third	19	6	6	12	12
Fourth	126	70	76	86	88
Fifth	10	8	13	12	12
Sixth	15	8	13	11	14
Seventh	101	77	67	68	58
Eighth	---	7	3	3	6
Ninth	---	11	7	13	7
Tenth	45	26	41	53	36
Eleventh	---	2	1	---	---
Twelfth	---	1	---	---	---
E.H.H.	5	2	3	2	4
TOTALS	443	312	297	338	338

Further analysis of the area of the screening failed by the child is as follows:

Test	1959-60	1960-61	1961-62	1962-63	1963-64
Right Eye Acuity Only	37	54	43	32	36
Left Eye Acuity Only	46	32	39	45	43
Right Eye Farsightedness Only	12	10	3	24	16
Left Eye Farsightedness Only	11	5	3	6	8
Muscle Balance Far Only	13	7	6	7	10
Muscle Balance Near Only	92	41	36	44	32
Failed more than one part of the test	232	163	167	180	193
TOTALS	443	312	297	338	338

Inasmuch as the vision screening in the initial year did not get under way until the spring, only gross statistics were recorded. However, number of boys and girls by grade and by school, tested and referred was tabulated during the years following. Table 1 presents data on the vision screening results for the 1963-64 school year. Table 2 presents data on the vision screening results for a four year period. It is interesting to note the percentage of referral for the four major grade levels tested. The theoretical assumption that the complexity of the instructional procedure would result in a greater percentage of referral at the first grade level does not seem to hold true in this survey.

For the past four years the percentage of referral has been consistently in the area of 11 percent. The initial year of the screening found the referral percentage at 17 percent. Perhaps the factor of greatest significance in the reduction in the percentage referred was the administration

of retests to those who failed. This procedure of rechecking increased the time necessary to complete the screening in a given school, however, it was felt to be beneficial in reducing the number of over-referrals.

The following are the combined results for the four year period from the 1960-1961 school year to the 1963-1964 school year:

Were fitted with glasses	562
Were under medical treatment for the eyes	36
Were recommended to do eye exercises	15
Were found to have no visual difficulty	116
Received "other" recommendations which indicated slight muscle imbalance or slight refractive problems which did not warrant correction at the time of examination	142
TOTAL	871

The following is the combined breakdown of the follow-up on the referrals who were not examined by eye doctors:

Stated they intended to follow through in the immediate future	206
Had moved from the community	15
Stated they did not intend to follow-through	8
Stated that because of religious belief they would not follow-through on the recommendation	1
Were not available at the time of phone and/or home call	135
Had not followed through due to financial reasons	39
Combined total for those who followed-through plus follow-up total	1275

Summary and Conclusions

Any program which can successfully call upon the assistance of the community should be able to benefit from such assistance. Such benefits are not limited to the simple realization of the goal but extend to the school community relations. The utilization of the community volunteers creates good public relations and provides the schools with competent testers. This procedure for the vision screening should be continued.

Additional strength may be added to the reporting procedure if a procedure whereby teacher notification of the existing impairment can be insured. Also strengthening of the follow-up procedures must continue. Optimistically the percentage of parents who now follow-through on the initial letter is steadily increasing from year to year.

TABLE I

BY GRADE	No. of Boys Passed	No. of Girls Passed	Total Passed	No. of Boys Failed	No. of Girls Failed	Total Failed	No. of Boys Glasses	No. of Girls Glasses	Total Glasses	No. Boys Total	No. Girls Total	Total Tested
K	4	4	8	1	1	2	0	0	0	5	5	10
1	426	444	870	50	40	90	15	19	34	476	484	960
2	52	49	101	2	7	9	3	2	5	54	56	110
3	47	44	91	8	4	12	5	5	10	55	48	103
4	318	288	606	42	46	88	49	60	109	360	334	694
5	29	32	61	7	5	12	8	9	17	36	37	73
6	27	20	47	3	11	14	6	8	14	30	31	61
7	212	183	395	28	30	58	90	103	193	240	213	453
8	11	13	24	2	4	6	1	5	6	13	17	30
9	25	22	47	3	4	7	11	15	26	28	26	54
10	132	138	270	17	19	36	97	157	254	149	157	306
11	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-
EMH	14	9	23	3	1	4	1	0	1	17	10	27
TOTAL	1297	1246	2543	166	172	338	286	383	669	1463	1418	2881

TABLE II

1960-61 1961-62 1962-63 1963-64 Combined Totals	No. of Boys Tested	No. of Girls Tested	TOTAL TESTED	No. of Boys Passed	No. of Girls Passed	TOTAL PASSED	No. of Boys Failed	No. of Girls Failed	TOTAL FAILED	No. of Girls Wore Glasses	No. of Boys Wore Glasses	TOTAL WORE GLASSES
Kdg.	10	8	18	7	7	14	3	1	4	0	0	0
1	1913	1786	3699	1752	1630	3382	155	151	306	54	53	107
2	194	197	391	181	183	364	13	14	27	11	14	25
3	177	175	352	157	155	312	20	19	39	14	16	30
4	1389	1334	2723	1263	1137	2400	124	197	321	178	208	386
5	137	130	267	118	104	222	19	26	45	20	29	49
6	121	114	235	103	86	189	18	28	46	14	35	49
7	1012	881	1893	893	727	1622	117	153	270	301	421	722
8	54	64	118	48	51	99	6	13	19	16	21	37
9	146	129	275	128	108	236	18	20	38	45	83	128
10	681	563	1244	612	476	1088	59	87	146	379	551	930
11	4	10	14	4	7	11	0	3	3	5	7	12
12	3	9	12	3	8	11	0	1	1	1	1	2
EMH	35	25	60	26	23	49	9	2	11	1	1	2
TOTALS	5876	5425	11301	5295	4702	9997	560	715	1275	1039	1440	2479

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APPENDIX

Champaign Community Schools

Community Unit School District No. 4

Champaign, Illinois

61822

OFFICE OF SPECIAL SERVICES
705 South New Street

Dear Parents:

During the past few weeks we have been conducting a hearing survey in our schools. The results of our tests indicate that your child could benefit from medical advice concerning his hearing.

Will you kindly take him/her to a qualified doctor as soon as possible and request that the enclosed form be completed and returned to our office. We have enclosed a stamped, addressed envelope for the convenience of the doctor.

If your child is under medical care for a known ear condition, please send the enclosed form to the doctor for him to complete and he should then return it to our office in the enclosed envelope.

Thank you for your cooperation.

Sincerely yours,

John B. Weaver, Coordinator
Vision and Hearing Screening

enc.

CHAMPAIGN COMMUNITY SCHOOLS
DISTRICT NO. FOUR

Conservation of Hearing

Date_____

Pupil's Name_____ Parents Name_____

Address_____ Age_____ Sex_____

School_____ Teacher_____ Grade_____

TO THE DOCTOR: As a result of our hearing survey, the above named pupil indicated the need of an ear examination. As indicated on the enclosed audiogram, the obtained thresholds fall within the A.M.A. criteria for medical referral. Following your examination may we please have your findings? Please mail this form in the stamped, addressed envelope which is enclosed for your convenience.

DIAGNOSIS:_____

Further treatment recommended:_____

_____

PROGNOSIS:_____

Further medical recommendations:_____

_____

Date of re-examination:_____

May this child participate in the physical education program? Yes_____ No_____

May this child participate in swimming? Yes_____ No_____

Should this child have preferential seating? Yes_____ No_____

ADDITIONAL REMARKS:_____

_____

_____

Otologist_____

Address_____

_____

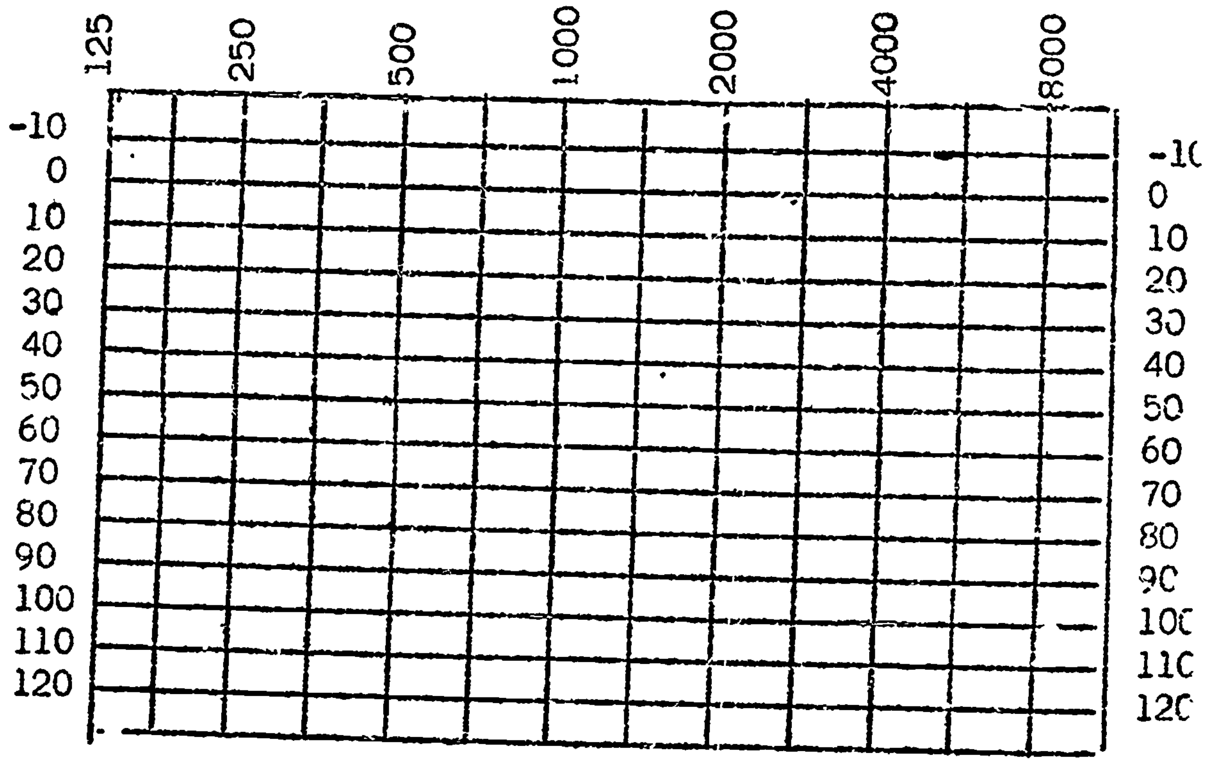
CHAMPAIGN COMMUNITY UNIT SCHOOLS
DISTRICT FOUR

____
Date Tested

____
Tester

Sweep at ________ db

Pass Sweep ________



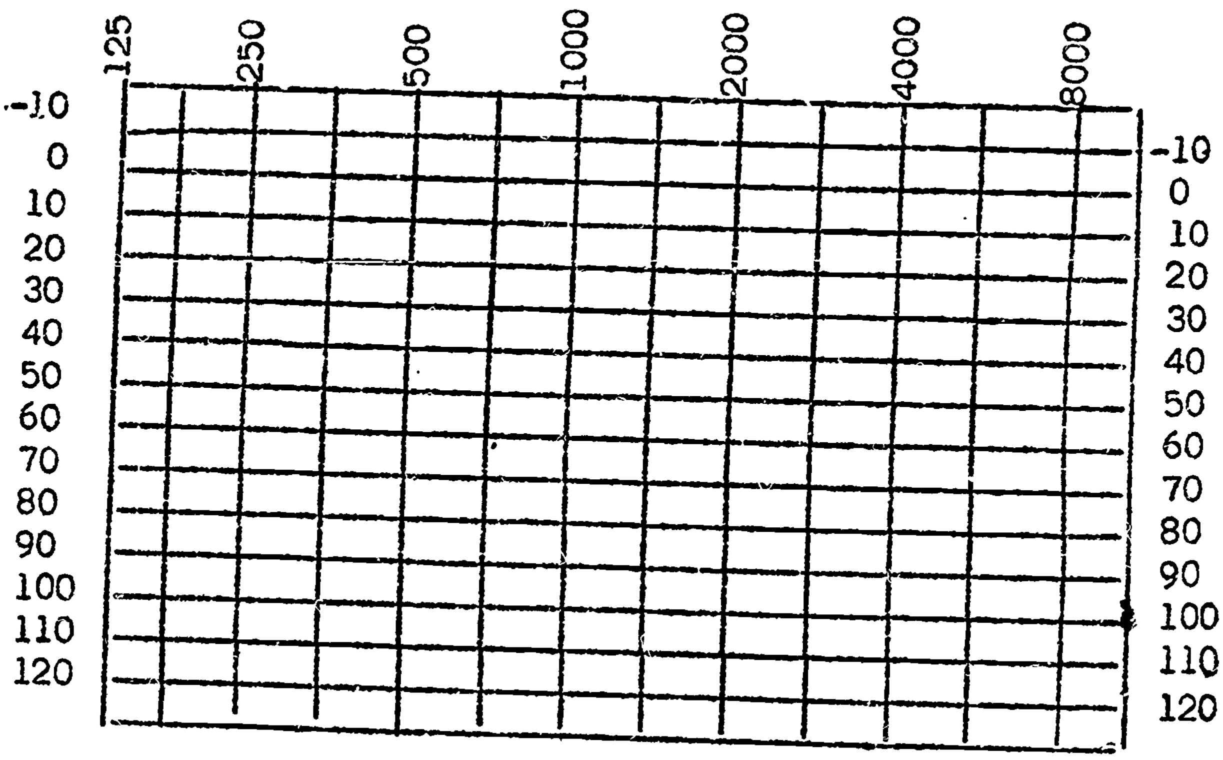
Name ______________________________ Address ____________________ Phone ________
Last First Middle

School ____________________ Grade ______ Age ______ Boy Girl

- -

____
Date Tested

____
Tester



Remarks: ____

____

____

CHAMPAIGN COMMUNITY SCHOOLS

_____ received a hearing test(s) on _____. On the basis of the hearing test(s) it was recommended that he/she consult a doctor concerning his/her hearing. The above named received an otological examination on _____.

In view of the results of the hearing test and the report received from the doctor, the following recommendations seem warranted:

Participation in physical education	yes	no
Participation in swimming	yes	no
Preferential seating	yes	no

Additional remarks: _____

_____

John B. Weaver
Supervisor of Speech and Hearing

Champaign Community Schools

Community Unit School District No. 4

Champaign, Illinois

61822

OFFICE OF SPECIAL SERVICES
705 South New Street

Dear Parents:

During the past few weeks we have been conducting vision tests in our schools. The results of our test indicate that your child, _____ could benefit from a complete eye examination.

Will you kindly take him/her to a qualified eye doctor of your choice and request that the enclosed form be completed and returned in the envelope enclosed for the doctor's convenience.

Thank you for your cooperation.

Sincerely yours,

John B. Weaver, Coordinator
Vision and Hearing Screening

enc.

CHAMPAIGN COMMUNITY SCHOOLS (1963-64)

Health Program
Conservation of Vision

VISION REPORT ON PUPIL REFERRED

Pupil's Name _____ Parents' Name _____

Address _____ Birthdate _____

School _____ Grade _____ Teacher _____

TO THE DOCTOR: As a result of the Vision Conservation Survey, the above named pupil gave evidence of the need for an eye examination. Following your examination, may we have your findings for inclusion in the school health records. Please mail in the stamped, addressed envelope enclosed for your convenience.

Uncorrected Visual Acuity		Best Corrected Visual Acuity	
R	Near _____	R	Near _____
	Distant _____		Distant _____
L	Near _____	L	Near _____
	Distant _____		Distant _____

Were glasses prescribed? Yes ____ No ____ Date of eye examination _____

Correction ordered:

R _____

L _____

Is the cause one of the following:

Refractive _____

Functional _____

Organic _____

How much of the time should these glasses be worn? (1) Close work _____ (2) Distant vision ____ (3) On the playground _____ (4) All the time_____ (5) All the time except on the playground _____

Should this child have front seat placement? Yes ____ No ____

Should the amount of close work be limited? Yes ____ No ____

When should this child be re-examined? _____

Recommendations other than glasses: _____

_____

_____
Examiner's Signature

_____
Address

_____
Date of this report

Champaign Community Schools
District No. 4

VISION SCREENING PROGRAM

Date of this report _____

_____ failed the vision screening test administered on _____. A report has been received from the examining doctor which indicates the following:

Were glasses prescribed? Yes _____ No _____

How much of the time should these glasses be worn? (1) Close work _____

(2) Distant vision _____ (3) On the playground _____ (4) All the time _____ (5) All the time except on the playground _____

Should this child have front seat placement? Yes _____ No _____

Should the amount of close work be limited? Yes _____ No _____

Additional remarks: _____

_____

_____

_____

_____

Champaign Community Schools
VISION SCREENING

Name _____ Parents Name _____

Address _____ Telephone _____

School _____ Grade _____ Age _____ B. G.

TESTS

R.E. L.E. + Lens L.E. R.E. M.B.F. M.B.N.

(Circle one) PASS FAIL QUESTIONABLE

Additional Remarks _____

_____

Champaign Community Schools

Community Unit School District No. 4

Champaign, Illinois

61822

OFFICE OF SPECIAL SERVICES
705 South New Street

Dear Parent:

During the past few weeks we have been conducting vision tests in our schools. Children wearing glasses have not been tested. We note that your child, _____, is either wearing glasses or known to be under professional care. In order to complete our records, will you please have the doctor who last examined your child's eyes complete the enclosed forms and return them in the stamped, addressed envelope enclosed for his convenience.

Thank you for your cooperation.

Sincerely yours,

John B. Weaver, Coordinator
Vision and Hearing Screening

P.S. This does not require an office visit unless requested by your doctor.

enc.

CHAMPAIGN COMMUNITY SCHOOLS (1963-64)

Health Program

Conservation of Vision

VISION REPORT ON PUPIL ALREADY UNDER PROFESSIONAL CARE *

Pupil's Name _____ Parents' Name _____

Address _____ Birthdate _____

School _____ Grade _____ Teacher _____

TO THE DOCTOR: As a result of the Vision Conservation Survey it was noted that the above named child was under professional care. May we have the visual findings of your latest examination of this child for inclusion in the school health records. Please mail in the address envelope enclosed for your convenience.

Uncorrected Visual Acuity		Best Corrected Visual Acuity	
R	Near _____	R	Near _____
	Distant _____		Distant _____
L	Near _____	L	Near _____
	Distant _____		Distant _____

Were glasses prescribed? Yes ____ No ____ Date of eye examination _____

Correction ordered:

R _____

L _____

Is the cause one of the following:

Refractive _____

Functional _____

Organic _____

How much of the time should these glasses be worn? (1) Close work _____

(2) Distant vision _____ (3) All the time _____ (4) On the playground _____

(5) All the time except on the playground _____

Should this child have front seat placement? Yes _____ No _____

Should the amount of close work be limited? Yes _____ No _____

When should this child be re-examined? _____

Recommendations (glasses or other): _____

_____

_____

Examiner's Signature

_____

Address

_____

Date of this report

* This form is used for the child who is under professional care, whether wearing glasses or not at this time.

Champaign Community Schools
District No. 4

VISION SCREENING PROGRAM

Re: _____ Date of this report _____

The pupils who wore glasses or were under doctor's care for their eyes were not tested in the vision screening. However, a report was requested from the doctor who last examined the child's eyes. This report has now been reviewed and indicates the following:

Had glasses been prescribed? Yes _____ No _____

How much of the time should these glasses be worn? (1) Close work _____

(2) Distant vision _____ (3) On the playground _____ (4) All the time _____

(5) All the time except on the playground _____

Should the child have front seat placement? Yes _____ No _____

Should the amount of close work be limited? Yes _____ No _____

Additional Remarks: _____