

Proceedings of the Iowa Academy of Science

Volume 27 | Annual Issue

Article 39

1920

The Talent Survey in Our Music School

Esther Allen Gaw

Copyright ©1920 Iowa Academy of Science, Inc.

Follow this and additional works at: <https://scholarworks.uni.edu/pias>

Recommended Citation

Gaw, Esther Allen (1920) "The Talent Survey in Our Music School," *Proceedings of the Iowa Academy of Science*, 27(1), 227-228.

Available at: <https://scholarworks.uni.edu/pias/vol27/iss1/39>

This Research is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

SYMPOSIUM: SOME RESULTS OF CURRENT RE-
SEARCH IN THE PSYCHOLOGICAL LABORATORY
OF THE STATE UNIVERSITY OF IOWA

INTRODUCED BY C. E. SEASHORE

Investigations at the psychological laboratory are at the present time centering upon two general fields which are more or less closely related; namely, the Psychology of Music, and the Psychology of Basic Motor Capacities. The former is represented essentially by the first six titles, and the latter by the last six.

The work in our laboratory has for a number of years been characterized by team work shown not only in the unit coöperation represented in this program, but also by team work reaching backward in that several of the problems here represented are merely the present link in the chain of previous investigations by other persons on the same subject in this laboratory. Our aim is to put one man after another upon a problem that has once been taken up until the cumulative results reach a satisfactory state.

This team work has great advantages in that it enables those who direct the research to concentrate their energies, not only for one year but for a series of years, upon the same problem, and, as we cannot employ research specialists for life, this dovetailing together of apprentice periods of research students is found to be a very happy procedure. Furthermore, research students, like certain plum trees, grow best in bunches, and the shoulder to shoulder coöperation upon related problems is a stimulus to achievement.

THE TALENT SURVEY IN OUR MUSIC SCHOOL

ESTHER ALLEN GAW

The forty-six students who are majoring in music have been given a series of psychological tests during the year 1919-1920. The tests for sense of pitch, sense of intensity, sense of time, sense of consonance, and tonal memory were given not only to those majoring in music, but also to the large groups in harmony and history of music, by means of the phonograph disks. The large

groups were also given the army intelligence test and the auditory imagery group test. Those specializing in music were measured for their motor ability by means of eight motor tests; first, a series of motor tests showing the general reponse of the fingers, hands and arms. These four are motility tests—the test for rapidity of tapping described by Mr. Ream; free action, a test of the ability to mark time at a uniform rate; timed action, a test of the ability to keep time with a sound recurring every second; rhythmic action, a test of the ability to mark a complicated rhythm; and visual serial action, a test of the ability to react to visual stimuli, described by Mr. Hansen. The second series of motor tests are those given on the tonoscope. They measure (1) ability to sing the keynote D, 290 v.d., (2) ability to carry the tune America, and (3) ability to sing a very small difference in pitch. The motor and visual imagery tests were given individually to the forty-six students.

In addition to the seventeen tests we have the ratings of the teachers as to the application, control of rhythm, ability to read music at sight, and progress of each student. This gives us criteria of achievement with which to compare the measurements.

In general the music students are found to be average or above in the discrimination tests. Selection has already taken place before they come to the music school, a selection based upon the sensitiveness of the ear to the factors of musical tone. In the motor tests they vary more. Timed action and the singing tests show the effects of training, for the records are uniformly very high.

In making a talent chart all of the measurements are reduced to percentile rank; i.e., rank on a scale of one to one hundred, one being the lowest rank obtainable in any measurement, 100 the highest and 50 average. The results in all the tests have been reduced to this common basis and are thus comparable. Talent charts, showing characteristic points were exhibited. The first is of a student who is very superior in every measurement but one and who, according to her teacher's ratings, is also very superior in application, control of rhythm, etc. The second shows a superior student who is also superior in achievement. The third shows a student about equal to the second in ability, but who is not achieving what she should. The fourth shows a student of average ability who is also average in her achievement.