though these tests proved out, they are not to be used separately since all three are necessary before one may draw conclusions.

The final session of Section Q's program consisted of contributed papers (30 December). Paul Wittey (Northwestern University) summarized 15 annual studies of television-viewing habits of children and youth. Favorite programs and total viewing time were reported. Gains in vocabulary, changes in reading habits, relation to succession in school, and undesirable outcomes were among conclusions discussed. Philip H. DuBois reported on the statistical procedures by which statistical controls may be substituted for experimental controls in educational situations. The method involves (i) development of a hypothesis relating gain in proficiency to measurable traits; (ii) measurement of pertinent variables, including initial and final level of proficiency; and (iii) estimation of the relation between the primary variable and gain. Melvin P. Robbins (University of British Columbia) reported on a study which tested the Delacato conception for certain cognitive abilities in children. His study fails to support the Delacato hypothesis. R. J. Tritschler (IBM) reviewed the many problems faced by librarians in cataloging and retrieving printed materials. The potential solution through the use of computers was presented.

Fredric B. Dutton,
Secretary

National Association of Biology Teachers (Q8)

Four sessions comprised the core of the NABT program. In the session, "Specific techniques in biology," Nicholas Eigsti (Ball State University) used yellow-green soybeans to show how genetic ratios can be taught as an open-ended experiment. Darwin Thorpe (Compton, California, College) showed how he used 35-mm slides to make vertebrate dissections more efficient. To show evolution, Marion S. Baran (Riverside-Brookfield High School, Illinois) explained how he innovated with plastic refrigeration containers to raise Drosophila. One of the problems with electrophoresis is its high cost. Sister Mary Ivo (Chicago Archdiocese) showed how she utilized simple and inexpensive equipment.

Another session, "BSCS and re-

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research participation program,” had Paul Geisert (Oak Park and River Forest, Illinois, High School) demonstrating his “think box,” a skull into which students are encouraged to place questions. M. Cassandra Hickey (Medford, Massachusetts, High School) talked about her guide sheets which she used to help her students understand better the BSCS Yellow Version. In Oregon at Twality Junior High School, Arthur Bierdman used his students as part of a NSF research participation ground squirrel study. And Gladys Kleinman (Rutgers University) explained her inquiry-oriented methods course to train nonscience oriented elementary teachers.

In a session, “Teacher training and resource use in biology,” Tom Mertins and Jerry Nisbet (Ball State University) explained that their NSF summer institute stressed cytology, genetics, and biochemistry to fill the void of most secondary teachers. Kenneth Bandelier (New Haven, Indiana, High School) reported on his research which showed that teachers seldom made use of community resources. The necessity of keeping records of an organization, which can be made available for research, was stressed by Myrl Lichtenwalter (Wells High School, Chicago.)

In the last session, Alfred Novak (Stephens College) proposed a model college program for training future biology teachers, and Charles Ostrander (Merced, California, College) showed his device for obtaining immediate evaluation of student response to prepared questions. And finally, John Cunningham (Florida State University) explained how biological examples can be used to build science concepts in elementary students.

One of the most interesting and well-attended sessions was an “how-to-do-it” session where 20 teachers simultaneously demonstrated their pet ideas.

The highlight of the sessions was the NABT luncheon; Ralph Gerard (University of California, Irvine) talked on brains and learning.

Harry K. Wong,
Program Chairman

Education (Q)
National Science Teachers Association (Q9)

The NSTA and the Central Association of Science and Mathematics Teachers (Q5) (CASMT) coopera-