
**WHY I BECAME A SCIENTIST:
A REPORT ON INFORMATION OBTAINED BY
QUESTIONNAIRE**

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In the belief that knowledge concerning experiences of professional scientists might be inspirational to students in high-school scientific organizations, a simple questionnaire was presented at the 1944 and 1945 annual meetings of the Oklahoma Academy of Science.

The information obtained seems to hold some interest and significance for adult scientists as well as for juniors and to emphasize already-expressed needs for closer cooperation between the "Senior" and Junior Academies of Science in Oklahoma and perhaps elsewhere.

Although fewer than half of the 45 questionnaires returned were fully answered, we appreciate the courtesy of all who responded. Therefore, this summary is presented to suggest the need for further investigations of this type and to indicate the *status quo*.

THE QUESTIONNAIRE

Earliest recognized science interests (when? what?).....

My earliest response in research (when? what?).....

Encouragement received from parents (), teachers (), friends ().

First.....

Second.....

Name.....

Institution.....

Position.....

Are you willing to meet with Junior Scientists in your District if called upon for group meetings?.....

RETURNS

The members in attendance at the meetings were predominately experienced college or university teachers; the War had called the younger men. But where were the women students and high-school teachers? One may ask, "How is the blood bank to be filled?" Of those who returned the questionnaire 28 listed themselves as university teachers, 8 as college teachers, 1 as a high-school teacher, and 2 as professional geologists. As to vocation 5 were in administration; 8, botany; 1, chemistry; 1, general science; 7, geology; 2, history and economics; 3, mathematics; 1, physics; 4, psychology and education; and 7, zoology.

Concerning the first question 12 gave such answers as, "all my life", "at an early date", and "do not know when." Some gave specific dates as "1940"—these indicate that inspiration came before high-school days in 9 instances where the approximate ages of the individuals can be reckoned. Ten first became interested while in junior high school, 8 in senior high school, and 4 in college. These figures are vitally significant of the importance of high-school science club work.

The fields of earliest scientific interest were biology for 3, botany 3, chemistry 2, geology 2, mathematics 2, physics 1, prehistory 1, psychology 1, zoology 7. Twelve followed their early interests through to adult vocations; another 12 changed their science interests although not radically; 13 listed general science combinations as their early interests. It would seem that one's ultimate vocation has about a fifty-percent chance of being a direct continuation of his early activity.

Owing to ambiguity in our language or to lack of clear definition in the question, varying interpretations of "earliest response to research" resulted in replies that ranged from "At two, when my lips were burned by a 1000-legged worm" to "No real research was done until I took my Ph. D." The period of earliest response to research was before junior high school for 6, during junior high school for 2, in senior high school for 1, in college for 16, after college for 8. We may conclude that those who regard the first independent stirrings of curiosity as research answered that research began before high-school age, whereas those who "dignify" the term answered that research started with college or postgraduate work.

Perhaps the most significant revelation of the survey is the usual occurrence of a relationship between the earliest recognizable scientific interests and persons from whom encouragement therein is received. The sources of encouragement for early science interests were reported as follows: Parents only, by 2; parents and teachers—3; parents, teachers, and friends—10; brother and teacher—1; teachers only—13; teachers and friends—10. Seemingly teachers are definitely the most important source of encouragement for the development of early scientific interests.

Apparently some 23 of the senior scientists who answered would be willing to meet with the juniors in their respective districts.

Although the individuals contacted by the questionnaire comprise only about one-tenth of the membership of the Oklahoma Academy of Science, nevertheless the results may perhaps be regarded as a cross-sectional representation—"a straw in the wind" so to speak. Let it be reiterated that the returns were mostly from experienced college teachers; there is need of increasing the membership of the Academy with progressive younger scientists. There is particularly a need of training high-school science teachers to impart enthusiasm even before knowledge to their students. Beware of killing early enthusiasms! Individually Academy members are willing to contribute to the learning of amateur scientist groups. Collectively the Academy might provide financial support for part- or full-time science-club leaders—this is done in Wisconsin and some other States.

Let us look forward to "Science for service in a peace time democratic world."