

Pedagogia

Abstracts from the Literature

T. F. Morrison

POWERS, S. R. *Improvement of Science Teaching*. Teachers' College Record, 40: 273-283; Jan., 1939.

Dr. Powers introduces this special number of The Record with a general article on the relation of science instruction to the modern school and scholar. By specific references to subsequent articles which deal with the various fields of Science, he shows how the subject can be of vital importance in this present changing civilization.

FITZPATRICK, F. L. *Implications of Our Knowledge Concerning Biological Production and Control*. Teachers College Record, 40: 297-307; Jan., 1939.

Education cannot cause an entire nation to become suddenly conscious of its duties to posterity in the matter of the control of biological processes and the development of increased productivity. "But," continues the author, "the specific information of science which relates it to such conduct can be organized and related to a number of concepts and general insights . . . which may be the guiding forces in determining their behavior. Here lies the task of education. . . ."

SEARS, P. G. *Life Science in the New General Education*. Teachers' College Record, 40: 340-352; Jan., 1939.

Professor Sears, the author of that very interesting book, "Deserts on the March," draws an analogy between the relation of man to his environment and the tight-wire bicycle rider: both must

maintain a "moving balance." How man can do this depends to a large extent on how well he has been taught to control both the animate and inanimate factors in his environment. Science education plays its rôle in explaining this relationship.

MANN, P. B. *Attitudes and Their Relation to Science Education*. Secondary Education, 8: 17-20; Jan., 1939.

If properly handled, scientific experiments can more than carry their share of the burden of teaching the scientific method. To attain this objective is not easy and the routine conduct of the classwork may produce the opposite effects unless care is used. Mr. Mann offers the following suggestions based on his experience with high school classes:

1. Give only the minimum of directions. Let the student solve his own problems.
2. Have pupil assistants whenever possible; it arouses the interest and stimulates the ambitions of their classmates.
3. Give no clues to the answers. A well-planned and well-executed experiment or demonstration will do this.
4. Mechanical copying of figures and materials from texts, or dictations, into notebooks is of very dubious value.
5. Outside reading broadens horizons.
6. Drawings should be neat and truthful.
7. Tests should involve problem solving.
8. Each class session should be a cooperative venture in which class and teacher take part.
9. Remember the socio-economic aspects of the subject.