

For these reasons it would seem that teachers in colleges, who have been educated in the profession of pharmacy and who are aware also of the great need for sound instruction in the fundamental economic principles governing the field should set about making a careful study of the problem of the teaching of such subjects in the colleges under the supervision of the colleges of pharmacy.

Such a study should include a consideration of the following:

- (1) What to teach?
- (2) Why teach what we teach?
- (3) How teach what we teach?

The answers to these three questions are to be found, respectively, in the fields of educational sociology, educational philosophy and educational psychology. Particular attention must be given to the foundations of these fields and their relationships to the practicing pharmacist, as well as to the major objectives of the education.

Further, careful study must be given to the functions or primary uses of education which, according to the analysis of Professor Lomax are: (1) *adaptive*, (2) *unifying*, (3) *differentiating* (4) *selective*, (5) *directive*, (6) *participating*, (7) *preparatory*. The problem in the last analysis will be to interpret these functions in the field of pharmaceutical economics.

The question of the problem of subject matter requires a two-fold study of (1) the problem of activity analysis and (2) the problem of subject matter selection and organization. In other words, it must first be determined what men do in the field and then the curriculum or course of study must be based in a large measure upon these findings.

The foregoing, not intended to be complete, but rather suggestive of a way of proceeding to obtain some concrete data upon which to work, is given with the hope that soon a purposive study of the field of pharmaceutical economics will be initiated to the end of demonstrating indisputably its right to inclusion within any complete scheme of pharmaceutical education.

USE OF FLUIDEXTRACTS DURING THE PAST FIFTY YEARS.

BY E. N. GATHERCOAL.

A number of very interesting and valuable reports of surveys made on U. S. P. and N. F. drugs and preparations in prescriptions have been published in the JOURNAL. Recently work has been done in connection with prescription ingredient survey on the extent of use of fluidextracts; a tabulation has been made of the number of times each one occurs in ratio to 10,000 prescriptions. It has been found that in the larger pharmacies the greatest assortment of prescription items is called for and the lesser number of items is called for in the prescriptions of pharmacies where the number of prescriptions is less.

A tabulation has been made of fluidextracts for 10,000 prescriptions showing the number of times various fluidextracts were used in given periods about 1885, 1895, 1908, 1927 and 1931. A list of fluidextracts has also been prepared of about sixty in number, naming those fluidextracts which occur ten or more times in each 10,000 prescriptions.

The surveys which have been made are sources of valuable information from several stand-points, each survey is helpful in revision work. In that connection, of course, it must be taken into consideration that inclusion cannot be entirely dependent upon the extent of use in prescriptions.