# THE DEPARTMENT OF THE AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY

## TEACHING AND EXAMINING.

### BY ZADA M. COOPER.\*

A short time ago I listened for a few minutes to a lecture in an extension course for grade-school teachers on "How to improve the written examination." I heard neither the beginning nor the ending and little of what I did hear has a direct bearing on college examinations, especially along professional lines. However, some of the statements presented food for thought. "If we know how to teach a subject we can test our students' knowledge of it." If we know how to teach shall we not then scrutinize our own teaching methods and then shall we not study the methods used by others, especially those teaching similar subjects?

The ASSOCIATION'S plan of devoting a part of the time of our annual meeting to teachers' conferences is more than justified. Apropos of those sessions, I am wondering if teachers in ASSOCIATION colleges have read the report of the sessions of the conferences at the last annual meeting as printed in the 1925 Proceedings. If reading them proves as valuable to the readers as editing the discussions was to the Secretary, then they have been very helpful. Listening to and participating in such discussions ought to be much more so. In my opinion the good they can do is something that cannot be measured. Teachers of pharmacy owe it to themselves and to the institutions they serve to attend these meetings.

"Scientific examining must wait on teaching becoming a science." The speaker only reiterated what we all know, that teaching is far from being a science. He would have us spend more time in perfecting our teaching or, he would have us spend it first, and then try to improve our examinations afterward.

Another thought, often in our minds, comes again with perhaps a slightly different emphasis, that informal conferences between college instructors and State Board examiners should be the rule rather than the exception. Granting that members of examining boards know better than teachers *what* a registered pharmacist should know, may it not be possible that we who teach, imperfect though our teaching is, could tell them something about *how* questions should be asked so that they will test the candidates' knowledge of any subject? In most cases board members have not been teachers. If the psychologist-educator was right in saying that one who can teach well can examine well and if board members will tell us what they believe candidates for registration ought to know, our combined efforts should do much to reduce the percentage of failures in board examinations very materially.

College curricula are planned to take care of all lines of pharmaceutical endeavor. The two-year course, now almost a thing of the past, had the fundamentals reduced to the irreducible minimum. This minimum was for all who would go into pharmacy, for the seventy-five per cent who expected to become retail pharmacists and for the twenty-five per cent who would go into other branches.

Knowing what the examining boards think a registered pharmacist should

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know would enable teachers to stress those points or, at least, to direct attention to them without in any way detracting from other things that are being taught or changing the plan of courses. The National Association of Boards of Pharmacy and the American Association of Colleges of Pharmacy have a joint session each year and many things of importance come up for discussion. It is probably out of the question to think of getting into a crowded convention week another joint session devoted entirely to these questions of teaching and examining, but surely some phases of them might well be a part each year of our session.

Returning to the lecturer's theme of how to improve examinations, in preparing any examination there should, of course, be a very definite objective. The scope should be decided upon and the major topics analyzed and outlined. Sub-topics should be ranked in the order of their merit. Once such an outline is prepared, subtopics of lesser importance can be dropped until the examination conforms in length to the valuation placed upon it, that is, whether it is expected only to indicate progress or whether it is final for the subject, and, also to the time allotted for writing it. Hard questions should appear last, because the reverse is likely to discourage or frighten a student and either would affect the result. "Every examination," he said, "should be one of three types: the false-true, completion, or multiple choice." Several years ago the writer attempted to prepare examinations that would conform to these types, but with indifferent success. It would be interesting to know how much others have been able to do in writing College of Pharmacy examinations like these that seem to be the ideal of the psychologists.

An examination should test a student's ability to reason and to apply fundamental principles to the question in hand. Using the knowledge of facts and principles in an examination should be a part of the real training which will be the test in life after college. No group of teachers can foresee the problems which will confront their students in the practice of their profession. No group of teachers can know or can teach *all* of the facts that will be needed. We can try to teach what we do teach in a way that will train students to think and act in any situation. We can try to teach them how to find the facts and how to apply the principles they have learned. Life is that kind of an examination. In college we are asking what they know; in life, they will be asked what they can do. What that may be is influenced in some degree by how we teach.

#### GUARD THE WILD FLOWERS.

The acquaintance of pharmacists with botany instils a love for flowers and should persuade them to assist in the preservation of wild flowers and also in ridding sections of poisonous plants. It is a movement in which pharmacists can be helpful. There is more or less general destruction of plant life from purely selfish motives, and there should be some who will exhibit an active interest in the preservation of our wild flowers, just as in maintaining the beauty of parks. Aside from the beauty there is the opportunity of becoming better acquainted with nature and applying the information in practical ways. In killing off plant life our sources of water supply may suffer and, in time, we may miss these carbon monoxide absorbers. No class is more closely drawn to nature than pharmacists, because so much of the materia medica is produced in nature's laboratory.

#### BROOKLYN COLLEGE OF PHARMACY.

Governor Smith, New York, has signed a bill permitting the Kings County Pharmaceutical Society of Brooklyn to increase its holdings from \$150,000 to \$1,500,000. The purpose of the increase is in the interest of the larger Brooklyn College of Pharmacy.