

Papers Read Before the Sixty-Third Annual Convention

QUIZZES, TESTS AND EXAMINATIONS.*

H. V. ARNY.

From the early college days of the writer, he has heard arguments against final examinations as an essential part of the college course. He has heard that passing an examination is no criterion of the ability of the student; that a bright lad can "cram" up enough information during the few weeks prior to the examination to pass that ordeal with flying colors: while a conscientious student who knows infinitely more than the "crammer," may become "rattled" and do poorly under the same test. There have come to him statements that the examination questions are made up of a lot of disjointed facts, many of which are of no importance to the candidate in after-life; that far better would it be to watch the student day by day and graduate him on his record rather than on the marking of his answers to a batch of several hundred questions fired at him on a hot day in May or June.

These arguments appealed to the writer in his less mature years, but the more he has studied the question the more he sees how shallow is the logic of those who would abolish examinations.

In fact, the movement is a symptom of that dangerous fallacy prevailing in this, "the childrens' age," as it is fondly dubbed by its advocates. The precious little ones must be permitted to follow individual tendencies unhampered by adult meddling. In order that the child develop into a free agent, a thinker who thinks for himself, he must not be hedged in by rules that were pronounced essential by our grandparents and by the Holy Writ.

This pernicious doctrine pervades our entire educational system, grammar school, high school and college, so that now the mighty word "duty" seems eclipsed by the softer one "inclination" and the onlooker wonders where it will end. In these very days we have before us the illustration of the fruition of untrammelled individualistic childhood in a rich young man who has spent seven years and a big slice of a huge fortune in getting out of an asylum for the criminal insane. But to quit moralizing and to turn to our mutton, the final examination is the greatest incentive to work that is found in the college course and can be abandoned only if similar examinations are held throughout the year.

We will discuss later the relative value of tests and final examinations and at this place will consider the need of the written examination itself.

As to the claim that the passage of an examination is merely a feat in the art of "cramming," we will inquire whether those advocating the abolition of exami-

* Read before Section on Education and Legislation, A. Ph. A., San Francisco Meeting.

nations discountenance all memorizing on the part of the pupil? To cite what was said by the writer on another occasion:

"There are a tremendous number of facts that should be learned by students, despite statements to the contrary on the part of those of our teachers who promulgate the doctrine that learning should be a plethora of observation and a paucity of memory work, and I venture to go so far as to say that the reason some of the exponents of this idea are great, is because their minds are stored with information beyond their fellows—and that gotten as much under the midnight lamp as in the laboratory."

As to the criticism that examinations mean squeezing out of facts of little service in every-day pharmacy; facts that are forgotten so soon as the examination is over; the question depends largely on the character of the examination. To expect a man to know the solubility of quinine salicylate in water and in alcohol is absurd, but to expect him to know the solubility of potassium iodide in water and of iodine in alcohol is entirely proper; since the latter information should be at hand on almost every day of prescription experience.

To use a simile taken from drug store experience, there are in every pharmacy, hundreds of articles for which there is scarcely a call in a year. Of course, these things can be card-catalogued, but after all, is not the most valuable man in the store the one whose memory is "long" enough to find these things on the instant, without recourse to the catalogue? It is a dictum in business that the man who has the most facts on his finger tips is more useful than one who has to "look it up" almost every time a question is asked him.

Hence the tremendous value of preparing for a final examination after one has spent the college years in acquiring knowledge by absorption. But one phase of study is essential to the other. The man who leaves all of his studying for the final cram has a poor mental equipment after the examination is over; but the man who "bones" for the final examination, after rational study during the college term clinches the facts so that they cannot wholly get away from him in after life.

But final examinations are but one of several means that the teacher should employ in forcing his pupils to do their very best. In fact, were final examinations the only way of getting students to work, the writer would be tempted to join the anti-examination ranks and to urge that haphazard absorption was the best means of acquiring knowledge. Students must be prodded every week, if not every day, of the college course, else the best of them will lag in their studies. The two ways to stimulate them to further effort are quizzes and tests.

As to quizzes every man who has spent time in college knows what they mean. A group of twenty-five to fifty students in a room with an instructor at the desk. Mr. Jones is called upon to recite and the rest either sleep or fool around, while Jones fishes about in the recesses of his mind for the answer. If Smith, Jones' neighbor is bright, the answer is apt to come from Smith or his book via Jones' lips. If the teacher is keen, the digression is detected and the class is regaled for five minutes with a "dressing down" of Smith. If the teacher is dull, the game is not detected and Jones gets a "perfect" mark for Smith's answer.

The writer has studied the quiz system both as a student and as a teacher, and each year he becomes more and more convinced of the utter futility of the oral quiz, either as a means of instruction or as incentive to study.

Each year he endeavors to put more and more of his quiz work upon the basis of written tests, for in these he finds the fairest, the most practical method of making students work. Of course, in large institutions the marking of several hundred test papers each week means a vast amount of work on the part of the instructor upon whom the task falls. It might be added that the chief object of this paper is to suggest to those in charge of the administration of college work, to see that the marking of answers to tests be made the daily—not nightly—routine work of the instructors.

One cannot blame an instructor who is given enough duties to keep him busy all day, if he is not enthusiastic about spending his evenings marking test papers. Nor is it surprising that following the line of least resistance, the oral quizzes go on to the amusement, if not to instruction, of the students they are supposed to benefit.

The writer thinks that in a pharmacy college the quiz hours should be devoted largely to written tests. He feels that each student should get a pharmacy test one week, a chemistry test the following week, a materia medica or botany test the third week, getting back to the pharmacy test the fourth week. In each department the quiz hour should be allotted something in this style: the holding of a test one week, the explanation of the test the next week; possibly an oral quiz the third week; while on the fourth week, a written test is again in order.

Should such a schedule obtain, the student must study during every week of his course and he can see week by week his chances of promotion; and if a man getting fifty to sixty percent in his tests cannot see that he is doomed to failure at the final examination unless he is willing to knuckle down to hard work, he has no one but himself to blame when success is not his.

If the plan of making tests an official part of the instruction prevails; if they are declared as essential to the well-being of the student as are the lectures and the laboratory courses; if they are given regular places upon the schedule and if the marking of the answers is considered as a part of the daily routine of the instructor in charge, the need for final examinations will become less and less until the importance of that now essential part of college instruction will finally reach the vanishing point and those advocating the abolition of the final examination will have their way.

PROVIDING NEEDED EDUCATION.*

ROBERT P. FISCHER, B. SC., PHAR D.

Providing education or rather post-graduate education is one of the professed functions of the American Pharmaceutical Association and in order to properly carry out such education, the Association has adopted the "extension" idea through its monthly journal and the Yearbook, both of which reach every member of the Association.

Without a doubt the needs of the members, as far as keeping in touch with pharmaceutical progress is concerned, are thus well taken care of; but there is

* Read before Section on Education and Legislation, San Francisco Meeting.