French (outright), \$100,000; (residue), \$100,000; Lucius Tuttle, \$50,000; Nathaniel Thayer, \$50,000; William Endicott (residue), \$25,000; Matilda H. Crocker (outright), \$20,000; (residue), \$20,000; Mrs. W. A. Abbe, \$10,000; gift for George Henry May scholarship, \$10,000; gifts for research in a number of amounts, \$10,000.

Ohio University, Athens, Ohio, has just put into service its \$15,000 electric light and power plant. The boiler plant was previously installed in connection with the central heating system, and the above sum covered the cost of other station equipment, underground cables connecting the station with the various buildings, and the necessary transformers. The total capacity of the plant is nearly 400 horse-power.

The complete report of the proceedings of the First National Conference on Universities and Public Service has been printed, extending to 350 pages. Copies will be sent free to trustees and other university officers, public officials, editors and librarians. To others it will be sent at cost of publication on application to Edward A. Fitzpatrick, Box 380, Madison, Wisconsin.

H. J. Patterson has resigned as president of the Maryland College and Station, to take effect July 1, 1915, recommending in his letter of resignation the abolishing of the office of president and the substitution of an administrative commission consisting of a director of college work, the director of the station, and the director of extension work. This plan is under consideration by the board of trustees.

DISCUSSION AND CORRESPONDENCE FRATERNITIES AND SCHOLARSHIP

THE communication on "Fraternities and Scholarship" published in a recent number of Science¹ touches a problem of decided interest—the relation of fraternities to the welfare of our higher institutions of learning—and one which has received much attention during the past few years, particularly in the univer-

¹ Science, October 16, p. 542.

sities and colleges of the south and west. The treatment of the question by the writer who happens to be the assistant dean for men in the University of Illinois, although presented in a very "readable" form, leaves much to be desired however from even an elementary statistical standpoint, and the reader may well hesitate as to the conclusions to be drawn from the data presented, beyond the idea that fraternities may be taught to appreciate the high grades which are assumed to represent scholarship. Perhaps the demonstration of a proposition of this nature is sufficient, for the opportunity to thus influence men separated into groups competing with one another, goes far toward justifying the existence of such groups even though they may have certain shortcomings.

While among all men students (2,600) there is an increase in the average grade from 81.1 per cent.² for the first semester of 1909-10 to 82.3 per cent. for the second semester of 1913-14 and among fraternity men (700) from 78.7 per cent. to 81.9 per cent. for the same period, the actual increase during the five years is less, inasmuch as average second semester grades are in every case higher than first semester grades of the same college year. a result undoubtedly due to the elimination of the poorer students at the end of the first semester. Therefore similar semesters should be compared and the gain is from 81.4 per cent. to 82.3 per cent. for all men students relatively 1.11 per cent.—and from 79.7 per cent. to 81.7 per cent. for fraternities—relatively 2.51 per cent.

This is really a small increase to result from a five-year propaganda and when taken into consideration with other factors which may have been instrumental in bringing about the result, one might wonder as to whether the smoke denoted a fire. The plotting of graphs with relatively long ordinates often conveys a misleading impression.

For the second semester of 1910-11 to the second semester of 1913-14 there is practically no gain for the average grade of all students while fraternity students exhibit a gain ap-

² Approximations from the published chart.

proximating 1.7 per cent. relatively. Consequently the non-fraternity graph—which unfortunately was not published—must have tended downward. The interpretation of this result seems not to have been considered in the paper and if we accept the interpretation of the data as a whole as due to the greater interest by fraternities in grades, the downward movement of the plotted line is undoubtedly due to the transfer of men to the one group at the expense of the other group. Thus one might well regret that there were not subdivisions Alpha, Beta, Gamma, etc., in the non-fraternity group in order to see if the competition engendered would not raise the average grade of all, instead of permitting one to draw on the other for resources.

The statement is made that

in 1909 the chapters were widely scattered up and down the scale, and in 1914 they are closely grouped around the fraternity average. This fact means undoubtedly that during the interval between these years the fraternities have intensified their attention to scholarship.

Such an opinion evidently based on the range between chapters with the maximum and minimum grades, which happens to be smaller in 1914, is of course no criterion of "scatter" as ordinary inspection should have demonstrated. Computing the coefficient of variation based on chapter units, it may be found that this has a value in 1909 of $2.44 \pm .99$ per cent. and in 1914 a value of $2.02 \pm .95$ per cent., a negligible difference.

It would have been of considerable interest to have presented data for a discussion of the possible effect the increased interest by students in their marks might have had on grading by the faculty although the latter will deny it and even charge that such a suggestion is heresy. Nevertheless it is not at all impossible that the average gain of 1.11 per cent. for all students is connected with a factor of this nature, however unconsciously the result may have been brought about.

The whole question as to the value of grades as a criterion for scholarship and efficiency in our higher institutions of learning, particularly where based on frequent examinations throughout the semester, is still an open one, although several interesting papers bearing on the subject have been published. While the individual who would normally "loaf" is thus compelled to retain bookish facts temporarily, there are others in which a distaste for a subject results from such methods. It is evident however that until the grade of instruction in our secondary schools is brought to a much higher standard, we are not in a position to adopt the plan of the German universities and require a single examination period as a preliminary to the conferring of the degree.

The publication of data relative to efficiency in college instruction is to be commended, but the interpretation of the facts will often present many difficulties. The methods of correlation are adapted to solving numerous problems in pedagogy, and it is to be hoped that not only from the University of Illinois but also from a large number of other institutions may data be presented with a clear mathematical treatment.

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SENTIMENT VERSUS EDUCATION

For many years our principals, in secondary schools, have been dinning into the ears of the teachers the order to teach, not to "hear recitations." The same bureaucrats have urged the teachers to help the dull ones, letting the bright ones find their own way. It has resulted that by the time the teacher has gone through the five formal steps the bright students know enough to make a passable recitation the next day, at least if the teacher proves as "helpful" as the custom of the school requires. The dull ones know that the matter will be gone over and over again and they see no necessity to study. The teacher has displaced the text-book.

Our pupils do not secure the power to get the meaning of any passage more complex than what we find in the daily paper or popular novel. This is partly due to the fact that the teacher is ordered to use "simple language, the language of all great writers."