tional processes, and use it as feedback to help students self-actualize. I think we should also be aware that poor grades often reflect instructional, as well as student, deficiences. But let us not mislead ourselves and students by stating that college evaluation, even as presently conducted, is worthless when it comes to predicting success in later years.

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Arsenic and Phosphate: Measured by Various Techniques

It was interesting to note (*1*) that the Soap and Detergent Association and the enzyme manufacturers took Angino *et al.* (*2*) to task for what they seemed to regard as an irresponsible discussion of the occurrence of arsenic. . . . Now that the subject has been brought up I would like to add our experiences. We, too, have been finding arsenic in waters—in lake waters to be exact. In ten Minnesota lakes the concentrations of arsenic found in filtered surface waters taken in the fall were 7, 9, 11, 16, 22, 36, 105, 132, 216, and 224 μg/liter, respectively. The last four are well above the Public Health Service's limit for drinking water, but as lakes are not considered drinking water these days I have refrained from calling public attention to these figures. Indeed I have gone out of my way when asked about them to point out that they probably are not harmful. In this way I suspect more has been gained in peace of mind than has been lost in toxicity. (I do not mean to imply that if we close our eyes our problems will go away. On the contrary I believe we should keep our eyes and minds open, but perhaps our mouths shut, until we know what we are saying.) However, these numbers *are* very important for a different reason than health. Most investigators interested in lake pollution are measuring phosphate by some modification of the so-called Harvey method: usually by a molybdate–stannous chloride procedure. This procedure does not distinguish between phosphate and arsenate (the form in which most of the arsenic is present) and so many measurements are undoubtedly wrong in studies where arsenic is present at the concentrations we find. In fact, to give an example, the lake having an arsenic concentration of 224 μg/liter had a concentration of phosphate, by the Harvey procedure, of 104 μg/liter, but a bioassay showed the concentration of phosphate to be less than 1 μg/liter. Clearly if we hope to correlate algal growth with phosphate concentrations or fluxes we must do better. Some investigators who use the so-called Stephens technique may avoid the error somewhat but even this technique is not completely free of arsenate interference. I would recommend that those engaged in measurements of phosphate in lakes be aware of the problem and if it exists try the method we have found that completely eliminates the interference (*3*).

The source of the arsenate is probably from its addition to lakes as sodium arsenite to kill rooted aquatic plants. In Minnesota, records show that from 1956 to 1969 over 900,000 pounds of the chemical were applied. In New York State, from 1961 to 1966, about 85,000 pounds were used and it is likely that even greater quantities have been spread about in other states. The arsenite rapidly oxidizes to arsenate and, because of its relatively low involvement in biological processes, seems to have a long half-life.

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Doctor of Arts Degree

In his editorial (6 Nov., p. 586) H. Guyford Stever suggests that the rationale behind the Doctor of Arts degree is to fill a gap between the more research-oriented universities and the secondary institutions, the state and junior colleges. It is primarily to these institutions that students would go for training as teachers and it is these institutions that would be expected to absorb the holders of the new degree. I take exception to Stever's contention that new degrees must be created to