

Alumni Speak Out... II

Some random comments from the Alumni Survey questionnaire

In the 5,000 Alumni Survey questionnaires that have been returned to the Institute to date, responses to the back-page invitation for "comments" have been gratifyingly numerous. Although there is no such thing as a typical comment, some representative ones appear on these pages. Remember, however, that for every comment below, there is at least one other stating an opposite point of view.

All fancy pedagogic philosophy aside, if every professor or teacher was required to attend one speech clinic per month, 9 months a year, I feel the academic accomplishments of this nation would become historically notable.

Have always felt Tech was remiss in not offering extension type courses to keep graduates updated in general science and engineering advances through the years in more condensed form than commonly available via technical journals and periodicals covering specific areas.

I am and was too sensitive for the competitive rigors of Caltech. I needed more time to talk to women, explore educational areas, reflect on philosophy, needed more exposure to good Ivy League culture. Keen competition impaired drive to explore scientific areas on my own. Caltech o.k. for geniuses and non-sensitive types. However sensitive types are usually more creative. Caltech impairs creativity in bottom 90%.

Physics should be deleted from the underclass curricula, being replaced by humanities and an applied mathematics course, which should emphasize problem-solving and applications to all branches of engineering and science. The physics courses were awkward and inefficient because the student had not received sufficient mathematical training.

I often felt that Caltech was not the place I should be since I wasn't particularly interested in becoming an intellectual scientist. I wanted to know the things a scientist knows so I would then

know how things should be done, but the working out of problems with no immediate use for the answer was not of much interest. With the stress that Caltech placed on the intellectual rather than the pragmatic pursuit of knowledge I often felt that I was not really the type of student desired there. It gave me a feeling of insecurity which affected my studies. Though I have already noted that if I had it to do all over again I would attend Caltech, I would like to qualify that by saying that if Caltech were interested in training me to become an *engineer* I again would like to attend, but if Caltech continues to stress training for theoretical scientists with the expectation that most will go on to obtain PhD degrees I would rather go to another college.

How long has it been since an outstanding scientist or engineer spoke at the graduation banquet, rather than a corporate or military big shot?

It was my strong feeling while I was at Caltech — and it still is — that the use of graduate students and/or researchers for teaching *undergraduate* courses should be eliminated.

The normal shock of transition between high school and college, plus the abnormally difficult load imposed on the undergraduate by the Caltech curriculum entitle the student, I think, to the most competent and most experienced teachers available at Caltech — namely bona fide professors.

The present practice vis-a-vis graduate student teachers may be good experience for them but is certainly hard on many undergraduates!

I was not an undergraduate at Caltech. The undergraduates there seemed characterized by a vast technical egotism — a belief that they had all the answers, which they would deliver to an eager world as soon as they were graduated. This lack of technical humility must give them (and their employers) some nasty shocks when they start trying to cause real hardware to obey in the desired fashion.