

Alumni Speak Out... V

In the more than 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, these are some representative ones.

Humanities department should put greater emphasis on fewer courses (same total quantity but less choice). English important! Literacy in writing and speaking *very* important! At least as important as technical knowledge. History soon forgotten. Similar "one-shot" courses of little value. Memory Courses (ME 3) soon forgotten. Emphasis should be on *thinking out* problems.

I feel that the greatest asset CIT gave me was the ability to recognize and solve problems with the facts available. It is much more important to be able to do a lot with the facts you have than simply to be able to regurgitate vast quantities of facts. So, although I haven't used most of my course material in years and would probably flunk exams in most of the courses I took if I took the exams now, I find the ability to reason and solve new problems of immense, fundamental value every day. Somehow Caltech gave me this and it is priceless.

I also learned how to work under and survive great pressure. After my undergraduate years there anything seems easy. In surviving the process I feel I'll never really be afraid of anything again. I may be slowed down but I'll never be overwhelmed.

At the same time there are difficulties. The undergraduate school is still definitely the stepchild of the whole Institute. Interest seems to be in (1) faculty research (2) graduate school (3) undergraduate school. Many faculty members regard undergraduate courses as a chore and bore, their interest being confined to (1) and (2) as much as possible. The undergraduate school appears to be a place to unload gradstudents as T.A.'s instead of giving them fellowships, and I challenge any accounting that purports to prove that the undergrad school costs more to run than it brings in as tuition.

There is still the problem of grades. An undergraduate gets poorer grades at CIT than he would

at another school and this hurts when he tries to go on to a grad school. Despite the myth that "a Caltech C is like an A anywhere else" (it may be in terms of training), most schools assume a C is a C when they consider admitting you. Hence, a CIT undergrad is often forced into a lower quality grad school than he could get into with a higher GPA from another school.

I wasn't in the grad school long enough to really criticize but it appears that qualified people are being held in grad school for far too many years because they have to do "peon labor" tasks in setting up and running experiments that could be done far faster and more competently by engineers and technicians. It is nonsense to scream we need more scientists and engineers when you keep them for 6-9 years to get a PhD.

This sort of scathing criticism is a result, of course, of the thinking, critical type of person Caltech turns out. Caltech is a good place and I'm grateful to it. But it isn't perfect. In some regards it is a long way from perfect, and most alumni know it. Why does only 8 to 15 percent of a class show up at a reunion even if most of the class is in that area? And why do many CIT alums, when hearing some faculty member name, say "oh, that bastard!" The point that has to be faced by the CIT faculty and administration is that the criticism has a basis in reality, that something is really wrong, and that this isn't just griping and cynicism.

We tend to think of ourselves without reference to time. While we are still the youth we once were, we were also never a different person from the one we are now! A survey such as this evokes a perspective uncommon in our busy lives.

If we changed before, being influenced by our environment and associates, may we not still be changing?

If we are changing, is the direction to our liking? Or is it merely the line of minimum non-conformity?

If we have been helped by older people when we were young, just what is our reciprocal obligation?

And finally, if we do *not* subscribe to the ubiquitous goals of wealth and power, what are we doing to help establish the validity and status of other equal or superior goals?