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An Educational Model

You cannot teach a person anything; you can only help him to find it within himself. —Galileo

“We must educate people in what nobody knew yesterday, and prepare people in our schools for what no one knows yet, but what some people must know tomorrow,” says Margaret Mead. This has been the goal of medical education for as long as I can remember. Having opted for a lifetime of teaching and there being no question about his intelligence, the student of medicine is encouraged to take the initiative and practice what he hears and sees. Doing as well as studying under supervision, while no royal road to learning, is as good as has been devised to date. By broadening the sources of responsibility, all the while encouraging dissent, the student is afforded the moral advantage of becoming excellent in his own way. “…it is impossible you should take true root but by the fair weather that you make yourself: it is needful that you frame the season for your own harvest,” was Conrad’s prescription to Don John in Much Ado About Nothing.

A teacher may be a mine of information, but if he is also liberating, he refrains from laying down the rules, but rather speaks in terms of goals. Bronson Alcott said that the fine teacher defends his pupils against his own personal influence. Despite continuing importuning, the teacher is under the moral obligation to try not to siphon knowledge into the student. Since he is learning how to grow it is unnatural to do anything to stunt it. Many students have been conditioned to having their lessons laid on the line. They want the facts from A to Izzard, preferably sawn into planks for the examination platform, an attitude perhaps fostered by the tests that have become the rule in academe. Rarely are they learning experiences…

The way of doing things is not particularly difficult; every specialty has its local technique to master which is a mere matter of practice. As Jacques Barzun said, the problem is not ignorance but rather clumsiness. However, the art of exercising an endeavor is not transmitted along with the technique. Michael Polanyi has drawn an analogy with the violin business and the pathetic attempts to mimic what…Stradivarius did routinely with violins more than two centuries ago. The doctrine of the manufacture of violins is readily available to everyone. Perhaps better. The art cannot be specified in detail and transmitted by prescription, since no prescription for it exists. The hidden rules can be assimilated by surrendering oneself uncritically to the imitation of another. As the rules of tolerable behavior are extended, the requirement for slavish imitation becomes less. The student educated to liberate and fulfill his own nature, to increase the substance of his own personality, is prepared to encompass what nobody knew yesterday. For Goethe this was a guiding principle…

The word doctor derives from docere, a teacher. I am reminded of Edward Gibbon’s remarks that the power of instruction is seldom of much efficacy, except in those happy dispositions where it is largely superfluous. The triumverate—patient, student, teacher—is a fine educational combination because everyone is trying to learn. Not the least of the leaven contributed by the patient is in the facet defined by Robert Frost when he said, “Education is the ability to listen to almost anything without losing your temper or your self-confidence.”

It is not beyond conceiving that medical education could become a model for education in general. Courses involving the laboratory may be cited as fulfilling some of the criteria. But I would estimate that the third integer, namely, whatever it is that is being pursued in the student laboratory is not lively enough, and hardly comparable to the role of the patient in medical education. I wonder if Dean Herman Schneider of the University of Cincinnati College of Engineering had something like this in mind when he launched the system of cooperative education well over a half century ago.

This leads rather naturally to the evaluation process. As Lawrence Weed has insisted, performance is not likely to be predicted on an analysis of memory, but rather on an audit of action. The relationship between memory and action is not direct, for correct action depends considerably on proper discipline in approaching problems. Weed points out that what a man knows at one time is not to be equated with what he will do in the future. Therefore the best testing that can be devised does not concern the regurgitation of facts but rather performance in work. Hopefully the work will be of the kind that will now or eventually bring remuneration for doing what it is one likes to do, my definition of happiness.

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