

The concept of work, as an ingredient in the "character building" that our ancestors believed in, is presently in discard. The clamorous rhetoric of today is innocent of anything as practical as work. Anyone who rolls his sleeves up to do a simple job around the house or the office is put down at once as a "peasant."

Nonetheless, educators are finding that work can be a magic ingredient in the process of development for teen-agers and young adults. It is especially so for the bored and dispirited young people who have "tried everything," that is, everything but work.

My colleagues in universities and in technological institutes tell me daily of some apparent miracle in which an anti-social student in trouble with his teachers and his parents for nonproductivity suddenly "takes hold" and succeeds. The change is wrought by "work," actually by the work-study combination often known as "co-operative education." It is a poor name for an excellent system in which a student spends six months at a university or technical college, followed by six months in a relevant "industry." Russia and China take this method for granted. The supposedly enlightened West is only now making widespread use of this method. There have been pioneers, of course, but to get university presidents crusading for it is a great present-day advance.

In effect, one student at university classes is matched with one in industry, in the simplest form of this equation. It is reminiscent of the days when one bed sufficed for two workers, one on the night shift and the other working by day.

Recently I was given a lecture on the merits of co-operative education by a distinguished academic chemist, who is only now discovering the chemical industry, through his students apprenticed in it. His teaching improved, his classes became more interesting. For their part, his students could hardly wait to complete their academic six months in order to get back to "the real world," the world of work.

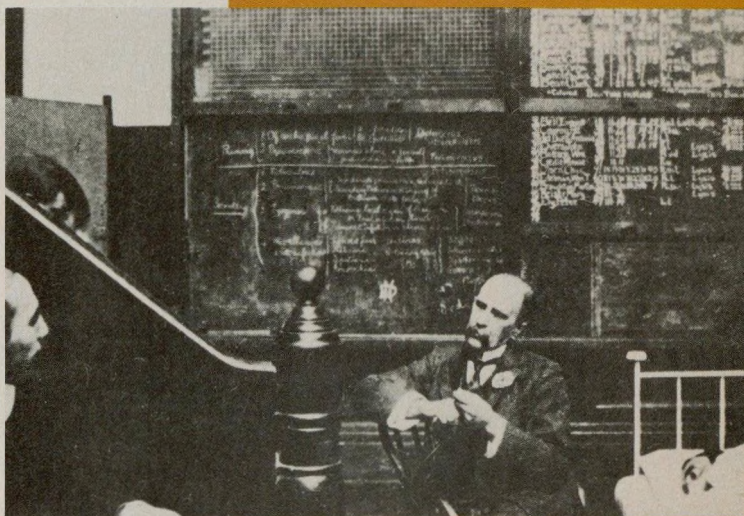
Another educator, in public administration, felt that he was living a new and happier life because his students, the first he had ever had, were doing so well in their "internships" in government, both at local and state levels. When these frustrated career men "get religion" in this field, there is no holding them back, and their students take on an air of being useful for a change. There are not enough hours in the day to research some entirely new field—new for them. A year previously these students would sneer, "What field?" or "Get lost."

One interesting phenomenon that becomes apparent in co-operative education is the leveling process in which both the teacher and the taught become "fellow students," just what Sir William Osler observed as he led students to the wards. When he said that he hoped his epitaph

(Continued on page 21)

WORK: OSLER'S MASTER WORD

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Sir William Osler holds grand rounds. This modern manifestation of an ancient academic partnership between the master physician and his students is one of the world's oldest forms of on-the-job training.

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would state that he brought students to the bedside, he meant that co-investigators and co-discoverers working at the bedside, regardless of any "generation gap," were the very essence of good education. Having grown up in the Air Force, I have taken this "academic-apprentice" partnership for granted. Now it is having the widespread recognition and implementation that it deserves. As a neurologist I have long thought that the sensory bombardment to which students are exposed can only produce a motor deficit, a poverty of activity.

In my more heretical moments I love to shock my university colleagues by suggesting that no one should be allowed into a university until he has been gainfully employed for one year after completing high school. The apoplexy that this touches off is beyond comprehension. "The best students will be lost," I am told. It is thought, by the highest authorities, to be a mad proposal. On the other hand, some people, who have never attended a university but who are more dedicated to higher education than are most graduates, are excited by this suggestion. They contend that it will make for better scholarship by students and professors.

Thirty-five years have now passed since the veterans of World War II descended on crowded campuses around the world. It is my impression that universities never had keener students and that most knew why they were at the university. Their pragmatic and mature approach cut right through the mists of academia. They are today among the greatest of our alumni supporters. For them, education meant everything.

Work has been discussed as "good medicine" since time began, but never so discerningly than by Osler in his famous speech of 1903, "The Master-Word in Medicine." This amazing discourse was delivered, along with one by Sherrington, at the opening of the University of Toronto's new building for the teaching of physiology and pathology. It was in this building, 18 years later, that the work by Banting and Best produced the life-saving insulin that now we take for granted.

There are some ringing phrases in Osler's address: "It is the open sesame to every portal, the great equalizer in the world, the true philosophers' stone which transmutes all the base metal of humanity into gold. . . . With the magic word in your heart all things are possible, and without it all study is vanity and vexation. . . .

"It is directly responsible for all advances in medicine during the past twenty-five centuries. Laying hold upon it, Hippocrates made observation and science the warp and woof of our art. Galen so read its meaning that fifteen centuries stopped thinking, and slept until awakened by the *De Fabrica* of Vesalius, which is the very incarnation of the master-word. With its inspiration Harvey gave an impulse to a larger circulation that he wot of, an impulse which we feel today. Hunter sounded all of its heights and depths, and stands out in our history as one of the great exemplars of its virtues. With it Virchow smote the rock and the waters of progress gushed out; while in the hands of Pasteur it proved a very talisman to open to us a new heaven in medicine. . . . And the Master-Word is *WORK*, a little one . . . but fraught with momentous consequences if you can but write it on the tables of your heart, and bind it upon your forehead."



Several colleges include a trimester job off campus as part of the usual curriculum requirement for graduation. Here an Antioch College student works as a researcher at a New York stock photograph agency.