

# Teaching Means —

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A lot of confusion about teaching would disappear if we dissected out similar but extraneous ideas. Teaching too often seems to be an all-inclusive term. Colleges and universities, and their teachers, cannot afford to try to assume the whole burdens of mankind. They cannot properly suppose that they are capable of taking on such responsibilities.

Coaching resembles teaching, but it is not such. The coach tells those in his charge what to do and how. The coach is concerned with immediate advice at the bench or in the field. His duties pertain to the situation at hand and are directly personal. He is the expert rather than the teacher.

Instructing is best illustrated by the sergeant in the Army. Rookies who fail to hit the dirt or drop a pill into their canteens may die. They have to be instructed until processes become automatic rather than thinking processes. Coaching as to how and when are secondary in the process of instructing. Instruction is specific but not immediate, and it is somewhat broader than coaching.

Teaching is the next step, and it is a step, not the whole ladder. Teaching involves the stirring of thought around a certain subject, the development of principles. It is centered around a reasonable depth in understanding. It involves students personally, for understanding is not directly transferable. For the most part, understanding lies within the recipient. Given good water and some thirst, he will do the drinking and his body will do the absorbing. The teacher is only a guide to see that the opportunity occurs, a cheerleader rather than a coach.

In the usual set of concepts included under teaching, educating is the top bracket. The thought is well loaded with prestige. Teachers are likely to think of themselves as educating students. The thought, however, is a gigantic hoax. There is such a thing as getting an education; there is no such thing as educating.

No courses in education exist. The School of Education

gives courses in coaching, in instructing, and in teaching, but necessarily it does not pretend to offer courses which provide an education. Education is a whole process.

Add to the total experience of a student his talent, throw in a curricular set of perhaps forty courses, and the total to that point is called an education, his education. It is a personal integrative process to which each teacher contributes a small share. "Education" is a verbal framework for a personal set of ideas, not a process which is met by teaching.

If we shave off the ancillary whiskers which teaching so easily acquires when teachers develop their self-images, teaching stands out as an entity and responsibility which is fairly sharp in contours. In the fundamental courses, teachers develop the general background for living, including the preparation for training in any one of the many possible occupations. In professional fields, such as agriculture or medicine, teachers also offer openings which will lead to principles, with an understanding of these principles in some depth.

Agronomy has its underlying principles, and so have animal husbandry, rural sociology, and agricultural economics. I did not pursue these further, but those were my courses and under various names they are still there. They still have basic principles, and some of my teachers were teachers. Two of them, however, were coaches or, at times, instructors. They instructed in details and coached on techniques, and with no principles on which to hang these points, I got nowhere.

Instructing and coaching are field jobs, not major responsibilities of schools and teachers. They are the finishing touches, for ultimately we come to doing, exchanging our services to our fellow men for which, in the complicated exchanges of our existence, they give us a living.

Teaching is at best no simple task, but at least by keeping it definitively simple we can keep it in focus.

## Independent Study For Undergraduates

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Independent study is difficult to define. On some campuses it is truly individual study; at times, it is self-directed study or study done outside of organized courses. At some institutions, independent study is assigned and regular classes or discussion and/or tutoring periods are utilized under the name of independent study. All of these, however, have as a goal independence in student learning. Most original independent study was offered as an honors program for the higher ranking portion of the student body. Now it is often offered, not only outside the honors program, but often at beginning freshman levels. The active involvement of students in the learning process is perhaps the best definition of independent study.

In an attempt to fit the Agriculture curricula to the needs of each student, the Department of Agriculture at Northwest Missouri State has instituted a program of independent study. This program has been in use for four years, and some rather valuable experiences could now be passed on to others.

The course as offered at Northwest Missouri State College is at an advanced level, that is, it is open to students who have finished 45 semester hours of college level work. This is in some opposition to experiences in other institutions where it has been found that "first year students may be more ready to accept and accomplish independent study than the more

mature upperclass students."<sup>1</sup> The course, however, was originally set up for students with above average ability and it was felt that the completion of at least 45 hours was necessary to prove ability. Studies have shown that grade point averages are not necessarily a good indication of the student's ability to learn from independent study.<sup>2</sup> Our results certainly agree with these findings. The student with a high grade point average has on several occasions produced at a much lower level than "average" students. As a result, we now rely more on a personal interview than on grades to determine which students are allowed to enroll for independent study.

Independent study at NWMSC is a single course of from 2-5 semester hours credit. No formal classes are held. Each student works through an advisor, where he is allowed considerable latitude in selection of a topic and methods used in his study. Some students elect a reading program, where a short list of readings are suggested and the student is then allowed to supplement this with readings of his own choice. Other students choose a research type problem, one in which they have an interest and background. In all cases, the student submits a paper on the subject chosen. Topics selected have ranged from the appraisal of farm land to the measure of soil permeability. Most students require more than one semester

for completion of the topic, however, a few will complete as many as five hours in one semester. Students on the whole have been enthusiastic about the course, though numbers are limited both by faculty load and the amount of time required of the student. This program has been neither used or thought of as a "snap" course.

From a faculty view point, the course has been rewarding. While it increases the demand on faculty time, the results have been satisfying to a degree that no one complains about the extra work.

One of the most satisfactory results of Independent Study has been the weekly seminar. This carries a one-hour credit and is required of all students enrolled in Independent Study and Problems courses. Student interest is high as they choose topics, make progress reports and finally submit their papers. Early seminars are used for instruction in research methods and procedures. The popularity of the course has necessitated limiting the number of students a faculty member can take. As a result, students make application to an instructor far ahead of registration and make every effort to convince him that they have a suitable topic for study and the drive to do independent work.

Below are a few factors which should be considered if such a program is undertaken:

1. The course(s) should be open to any qualified student.
2. Qualification should be based on the advisor's recommendation as well as grade point average.
3. The student should be free to select the topic and methods of study.
4. Meetings with advisors should be based upon student need rather than schedule.
5. Care should be taken that the student does not start a study that is too extensive to allow for depth.
6. A preliminary outline of the study submitted early in the semester is necessary.
7. Weekly seminars of students and advisors *offer an opportunity* to exchange ideas, compare methods and report progress.
8. An oral report before peers is an encouragement toward excellence.
9. After completion, papers should be made available to all students, either in the library or through the department.

<sup>1</sup>"Independent Study," U. S. Department of Health, Education and Welfare, p. 9.

<sup>2</sup>Op. cit., p. 1.

## Changing Concepts of Agricultural Education

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I would like to share with you some of the exciting developments in agricultural instruction taking place at the University of Hawaii.

We are in the midst of turmoil and conflict caused by the explosion in scientific knowledge and technology. This explosion has made the efficiency and productivity of American agriculture the envy of the world. Today one U. S. farmer can produce enough food and fiber for nearly thirty people, and indeed our nation could feed all the peoples of the world if we were willing to pay the price.

Thus it is clear that the revolution in knowledge has made it imperative for us to reconsider our traditional concepts of agricultural education. Certainly it is hard for many to understand that in these dynamic times agricultural education cannot continue to rest upon the past glories of the first one hundred years of the land-grant college system. The situation has been aptly described by Dean Earl Butz of Purdue who said "What we learned yesterday is obsolete today, what we learn today will be obsolete tomorrow!"

There are many paradoxes that confront our local students in agriculture. In a state known throughout the world for the high development of its sugarcane and pineapple industries they have received little course work or training in these subjects. Though many soon may be advising people in backward countries on agricultural development they cannot help but note that their home state does not produce enough vegetables and meat to supply its own demands. Though the development and the potential of agriculture in Hawaii are subjects for continued discussion and debate they find that the best opportunities for employment and experiences are on the mainland and in the foreign programs of the federal government.

How then, can the agricultural college guard its courses, its curricula and its students from becoming completely out of step with the changing needs of the community? What can we do about the disadvantages inherent to agricultural education in Hawaii?

Agricultural curricula are becoming more flexible to meet the needs of the individual student and his aspirations. There is a growing emphasis on providing what the student requires for

his career objectives. There is less concern for the age-old tradition that the instructor teaches *just what he wants to teach*. Courses, curricula and even departments are being consolidated in recognition of the increasing overlapping of traditional subject-matter areas.

At the University of Hawaii, the primary goals of resident instruction in the College of Tropical Agriculture are *clear* and well defined. They are to provide the student with a liberal education to acquaint him with his cultural heritage; to help him relate his work to knowledge-in-general and to train him in a profession in which he can make his living.

There are three developments which reflect our ideas for accomplishing these goals. (1) the strengthening of general education through a university-wide core curriculum; (2) the focusing on educational objectives through a practical experience facility at Pearl City; and (3) the motivation of students for international work.

Common cores in the liberal arts with firm foundation courses in the humanities and social sciences are already mandatory for all students in many institutions. This university now requires all students in the lower division or the first two years of college to obtain a common background. They have available a wide selection of courses in six general areas. These are (1) communications to provide competence in English and speech, (2) quantitative reasoning to develop the ability to understand and apply mathematics, (3) world civilization courses to provide broad comprehension of cultural development, (4) humanities to develop standards of value, beauty, and sharp critical judgement, (5) natural sciences to develop understanding of natural phenomena and of the scientific method and finally, (6) social sciences to seek understanding of human behavior.

This wide array of diverse courses in liberal education should provide concepts applicable to all phases of agriculture, concepts which will not be readily outmoded in the years ahead.

These courses can be given just as effectively at the new community colleges and at the Hilo Branch as on the main campus. They will be followed in the third and fourth years of college by specialized courses in the ten departments of the