

The instructor and the educator . . . are they really synonymous?

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Several years ago I gave an examination in a senior course in plant breeding which happened to be scheduled immediately following an extensive discussion of mutations. One question pertained to the origin of an abnormal plant in a farmer's field. I was disappointed but not particularly surprised to note that the majority of the students ignored their farm experience, their background in weed science, their courses in soil fertility and even other facets of plant breeding in answering the question. The recent discussion dealt with mutation. The course was plant breeding. Would a plant breeding instructor deliberately ask a question that could implicate herbicides? Of course he would. Does the extension specialist look for mutations because his last course at "State" was in plant breeding? Does the medical doctor diagnose a case of Scarlet Fever because his last patient had a sore throat?

Education, says Stuart Johnson¹, is "the knowledge of how to use the whole of one's self." When I, as a college instructor in plant breeding, fail to relate mutation breeding to organic chemistry, when I exclude plant physiology from my discussions of heterosis, or when I forget to tie John Smith's interest in anthropology to the evolution of crop plants, I fail in some small way to educate.

The professor's opportunities to educate are not limited to the classroom, however. The ideal college according to some educators is first concerned with making persons out of people². We might add that to accomplish this goal it is helpful for students to make persons out of professors. I once prepared a collection of letters from outstanding agriculturists and biologists to complement an appreciation course in Crop Science. I had asked these scientists to furnish us with a biographical sketch and any words of wisdom they might offer the undergraduate student who aspired to be a plant biologist. I was amazed to find that the majority of these distinguished professors did not emphasize course work as the major contributor to their success. On the contrary, the influence of one or two key individuals were credited for their early inspiration.

It is of particular interest to follow the "personal pedigree" of these scientists. Professor Coit Suneson, for example, wrote in 1964 "I was drawn to agronomy (at Montana State College) out of respect . . . (as a teacher and a man) for the Head of the Department Clyde McKee." In 1966 the Crop Science Award of the American Society of Agronomy was presented to Professor Suneson at the annual meeting held in Stillwater, Oklahoma. The award was made by Dr. Paul H. Harvey, Head of the Crop Science Department at North Carolina State University. Dr. Harvey had, as an undergraduate student, been motivated in agronomy by Professor Suneson. The chain of professor-student-professor goes on over generations. Personal

relationships are also part of one's education and they serve as a continuum of inspiration and motivation.

Finally, the good teacher must seriously consider a key word in the working definition we have presented for education. To educate we must encourage the student to use all of his attributes. We must motivate the student into constructive activity beyond the classroom.

If I have been successful in developing a good personal relationship with the student I am by now aware that he did not come to my classroom with a mind which is a "blank slate to be written upon."³ The student has developed some image of himself and of his career long before he has the rare privilege of attending my lectures. Unfortunately, his image of his life's work is somewhat like the image of a bachelor's wife. It is wonderful but undescribable. It is my responsibility to aid the student in bringing this "lovely face" into focus without undue distortion resulting from my own prejudices. It would be tragic indeed, if I succeeded in broadening the student's perspectives by challenging his imagination in a wide assortment of undergraduate experiences only to limit his view of occupations to the "keyhole" of my specialty area.

Are instructors and educators synonymous? The answer must be personal for each of us who attempt to teach. I have asked myself the following questions. Perhaps you would like to share them.

1. When John came to me last fall with a specific problem dealing with peanut maturation I instructed him to see his County Agent. John will be an extension leader himself next month. Did I promote the education process by my instruction?

2. Harvey is having a difficult time passing my course. I have had Harvey in other courses and he does not respond well to my teaching methods. He must be a little lazy I figure. Last week I attended a student program in which Harvey participated. I was truly amazed to find that Harvey has a beautiful tenor voice and that he sings regularly with the college choir and instructs a church choir. Have I been instructing a student when I should have been educating a person?

It seems to me that we who teach in Agricultural Institutions have been particularly guilty of instructing ends when we should have been educating means for man to live in society. As a consequence I fear that many graduates leave our ranks well instructed in black and white when they must live and work in a world of gray.

¹J. Stuart Johnson, The Mark of an Educated Man, Phi Kappa Phi Journal, pp. 32-38, Fall 1968.

²Curtis R. Hungerford, My Ideal College, Improving College and University Teaching, pp. 221-224, Autumn 1968.

³Sam M. Fleming, The Spector of Ignorance, Phi Kappa Phi Journal, pp. 9-16, Winter 1969.

Teaching Today's Agricultural Student

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Agricultural education in America has been the most successful in the world and I maintain that this success has largely been due to an early dedication to immediate, real, and pressing problems. Its success in the future will depend on the ability of individual professors to relate to the problems of an ever changing environment and involve their students in