

Teaching Award

This award was established in 1987 by the APS Council in recognition of excellence in teaching plant pathology. The award is presented to individuals with active responsibility for one or more courses in plant pathology and recognizes the individual's distinguished proficiency in teaching, as indicated by development and effectiveness of courses taught.

Harold S. McNabb, Jr.



Harold S. "Sande" McNabb, Jr., has served Iowa State University and the people of Iowa with tremendous dedication and energy. Sande has proved to be an able and productive researcher with a national and international reputation. However, in spite of his active research career, students and teaching have always been the focus of his professional life.

Whether its graduate students or elementary school children, Sande has exhibited that special gift in teaching—the challenging of students to reach toward the horizon of the topic being discussed. The 20 Ph.D. and 18 M.S. degrees awarded under his supervision attest to his

belief in the responsibility of “passing on the torch of knowledge” to the future professionals.

McNabb is a skilled classroom teacher who consistently tries to challenge his students. His approach to teaching is student centered, and he strives to teach students how to become independent learners and to apply their knowledge in problem-solving situations. He is intensely interested in the total education of students. Current “buzzwords” in higher education, i.e., critical thinking ability, communication skills, and international perspective, have been part of Dr. McNabb’s teaching for a long time.

Following a sabbatical leave in 1973 in Great Britain, Sande was convinced that his teaching needed to take a new direction. He had been teaching a popular and effective forest pathology course for 20 years but felt that students were being “cheated” if they were not given a truly integrated course in forest pest management. He began working with Dr. E. R. Hart of the Entomology Department. Together, they developed an interdisciplinary course in forest protection. Both McNabb and Hart are committed to quality teaching, and they put a tremendous amount of work into developing the course. Their time and effort were well spent; they have created a very exceptional course.

Plant Pathology 416, Forest Pest Management, was offered for the first time in 1976. The course has now been taught about 10 times, and it continues to evolve. Significant changes are made every year. This is truly a team-taught course. Both professors are in the classroom and laboratory nearly all of the time. They have developed a unique teaching style in which they often lecture by carrying on a dialogue intended to challenge current statements of fact and stimulate students to make their own interpretations. Students are encouraged to work together in reaching their own conclusions based on the available data. Student collaboration rather than competition is stressed. “After all, forest pest management decisions in the real world should be reached using the team approach.” Sande often says to persons critical of this teaching method. Most tests and the final exam are open book with problem solving being stressed.

In the laboratory, students are again stimulated to think critically and creatively. During the first half of the term, students

are introduced to the various forest pests. Their assignment during this portion of the laboratory is to work individually in creating dichotomous keys for the diagnosis of tree health problems. The latter portion of the term is devoted to computer simulations and group projects in which the students apply their knowledge to the solution of forest pest management problems.

Dr. McNabb’s concept of education has never been restricted to the classroom or the university campus. In the 1960s, he was involved in the Iowa Academy of Science Visiting Scientist Program, making many enthusiastic participatory presentations in high school biology classrooms throughout Iowa. Students were involved in culturing and inoculating pathogens as a part of his class contacts. He was a member of North Central Association teams that made accreditation visits to Iowa high schools during this period. He also was actively involved in the Iowa State University High School Teacher Research Participation Project sponsored by NSF.

Throughout his career, Sande has made room for talented high school students to work in his laboratory during the summer. He has taken hands-on science exhibits to the State Fair, the Farm Progress Show, and to Iowa high schools and science fairs. More recently, Sande has used the *Agrobacterium*-crown gall disease and in vitro plant culture in his hands-on presentations to elementary and secondary schools to take the mystery out of genetic engineering. For his efforts with one high school over the past two years, he was named Honorary Chapter Farmer by the school’s FFA chapter. Sande is truly an energetic ambassador for our profession.

Perhaps Dr. McNabb’s greatest influence on undergraduates is on the many students who have worked in his laboratory on research projects or simply for hourly wages. He has influenced many to pursue careers in science. But perhaps most importantly, regardless of their career interests, Sande is sincerely interested in their academic, social, and personal development. His greatest gift is his ability to relate to students as individuals, and the many letters that were attached to his nomination statement attest to the fact that Sande has had a tremendous influence on the lives of many of his students, both in and out of the classroom.