

Dr. James Vorst
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Degrees Received

Doctor of Philosophy, Crop Physiology/Ecoiogy University of Nebraska,1969
Master of Science, Agronomy-Turf Management Ohio State University,1966
Bachelor of Science, Agricultural Engineering Ohio State University,1964

Professional Positions Held

Assistant. Associate and Professor of Agronomy, Purdue University, 1969-Present.
Interim Assistant Department Head, Department of Agronomy. 1993-1994.
Coordinator, Agronomy Undergraduate Teaching Program, 1990-1994, 1995-present.
Visiting Teaching Fellow. Ethics, Science, and the Environment Program, Oregon State University, Jan.-Feb.1995.
Taught Contemporary Issues course. lectured on ethical issues in agriculture. and consulted with Oregon State faculty.
Curriculum Development Specialist, Faculty of Agriculture, Jordan University of Science and Technology, Irbid, Jordan, Oct.-Dec. 1994.
Conducted teaching development workshops, consulted with faculty on instructional matters, and explored future collaborative projects.
4H-Labo Japanese Exchange Program participant, Summer 1990.
Faculty adviser for student participants.
Visiting Professor, Institut for Pflanzenbau, Friederich Wilhelms Institut, Bonn, West Germany 1975-76

Honors and Awards

Crop Science Teaching Award, Crop Science Society of America
USDA Food and Agricultural Sciences Excellence in Teaching Regional Award
Usted in Purdue University Book of Great Teachers
Outstanding Teacher, School of Agriculture, Purdue University
Charles B. Murphy Outstanding Undergraduate Teaching Award, Purdue University
Fellow, American Society of Agronomy
Fellow, Crop Science Society of America
Recipient of ASA Agronomic Resident Education Award
Teacher Fellow, National Association of Colleges and Teachers of Agriculture
Outstanding Undergraduate Student Counselor, School of Agriculture, Purdue University
Outstanding Teacher in Agronomy, Purdue University (awarded four times)
Recipient of Purdue Parents Fund Innovative Teaching Grant
Recipient of Outstanding Undergraduate Counseling Award, Purdue School of Agriculture
Faculty Fellow, Meredith Resident Hall; selected Senior Faculty Fellow Meredith Hall four times

Professional Contributions

Dr. Vorst has been educational specialist for the Certified Crop Adviser (CCA) program since its inception in 1993. Much of the program's success can be attributed to his sound educational protocols. The program is learner directed, outcomes based, and is built on clearly stated competencies and performance objectives. He guided the initial construction of the program, and he annually coordinates publication of the Competency and Performance Objectives booklets,

with updated references, for both the International and Tri-state (Ohio-indiana-Illinois) programs. He encouraged developing Continuing Education Competencies, and assisted writing the first document that stated competencies for CCA Continuing Education programs.

The Natural Resources Conservation Service (NRCS) recognized Jim's expertise in outcomes based education, and asked him to develop performance based guides for Technical Service Provider (TSP) training. He organized proficiency development meetings and guided participants in identifying TSP proficiencies, wrote the proficiencies, and presented completed proficiency documents to the NRCS for five of their categories. This effort resulted in updated, directed guidelines that TSPs can use in training and field activities. It also provides instructor guidelines for NRCS TSP training.

Dr. Vorst was principal investigator of a USAID-ALO grant. He assembled and led a team of engineers and agriculturalists from Purdue and two Middle East universities in writing eight environmental management decision cases. The cases reflected issues of international importance: sanitary landfills, water treatment, and environmental damage. Students from Jordan, Lebanon, and the U.S. currently use these cases to examine similarities and differences in addressing environmental issues in different environments and under different cultural and technical constraints. This effort resulted in additional collaboration among the scientists involved.

Because no suitable, learner directed text was available for his Crop Production course. Dr. Vorst wrote a lecture manual and associated study guides. The manual contains specific outcomes expected of students for each module of the course. This manual has been adapted by other colleges, and contains learner directed activities that bridge basic principles to practical field applications.

Making education relevant has been a cornerstone of Dr. Vorst's teaching philosophy. Along with his graduate student, he wrote the decision case, Plow or Play: A Land Use Decision, which examined a State Senator's decision on rezoning farmland for industrial use. Students continue to find this published case especially relevant to the issues surrounding urbanization and the preservation of farmland in the country today.

Dr. Vorst recently served as Associate Editor of JNLRE. Because of his expertise in decision case writing, he oversaw reviews of manuscripts primarily related to decision case studies and served on the Editorial Board

In order to preserve and disseminate the rich history of the Rothamsted Experiment Station in England, Dr. Vorst interviewed Lawes Fellow Johnny Johnson at Rothamsted, England. Johnson explains the significance of the oldest fertility, rotation, and cropping experiments ever conducted. He explains how modern fertility practice is based on 1800's research began there, and relates how this work is being used today as a basis for charting nutrient movement. The program is available in DVD or video format.

As co-instructor international travel courses to Europe and South America, Dr. Vorst co-developed study materials and provided editing for two books over courses taught in Ecuador and in England and Scotland. The goal of these publications was to illustrate how agriculture and art have been related throughout history to today. These books elaborated on student experiences during the travels and provided suggestions for future travelers.

High school students and teachers generally do not have a grasp of the science and technology in Agronomy. In an effort to make agronomy relevant to these students and to provide laboratory experiments for science teachers, Dr. Vorst led the initiative to write Experiments in Crop Science, published by CSSA, which contained high school level science experiments using agronomic materials and examples. These experiments have brought the science of Agronomy into high school classrooms across the U.S.

Professional Contributions

Dr. Vorst continues to serve his profession with distinction through contributions in undergraduate education, leadership in development of certification programs, and his influence in the international arena. He is an accomplished and highly sought after teacher. He taught Crop Production to over 10,000 students at three universities over the past 40 years. He developed the Crops Resource Center at Purdue, which contains multiple learning materials used by students from several courses. He wrote and teaches a very popular Contemporary Issues course, cross-listed with Anthropology, which addresses ethical and social issues facing agriculture. He has conducted workshops in Issues Analysis on campus, in the community, at high schools, and at other Universities. He was invited by the Philosophy Department at Oregon State Univ. as Visiting Fellow in their Ethics, Science and the Environment program. He has presented seminars and workshops on Applied Ethics at Michigan State, California Polytechnic State Univ., Indiana State Univ., and to Indiana and Illinois CCA conferences. He taught a summer course, Agriculture/Natural Resources Issues and Ethics, at Oxford, England. These activities have reached a tremendous number of people from a wide range of professions.

Throughout his career he has advised over 600 undergraduates and 20 graduate students, and has coordinated Purdue Agronomy Teaching and Counseling programs.

Dr. Vorst has served our society and profession extensively by building competency based programs with measurable outcomes for certification and training. The international CCA program, with over 13,500 certified in the U.S. and Canada, is a model for other competency based programs. Much of the program's success can be attributed to Jim's expertise in outcomes based education. Dr. Vorst is responsible for managing program competencies and for constructing the exam. He also manages technical aspects of the Tri-state CCA program. Because of his expertise, he developed the proficiency areas for NRCS TSP training, and is presently assembling a competency based curriculum for Purdue's Extension Cropping Systems initiative. His work in competency based education and certification is especially significant, as it positively touches the lives of thousands of people across North America.

Internationally, Dr. Vorst has interacted with students, university faculty, and agriculturalists from Europe, South and Central America, and the Middle East. In 1994 he reviewed Faculty of Agriculture curriculum and conducted teaching workshops at Jordan University of Science and Technology. He worked with the President of the International Turfgrass Society in Germany, and co-instructed study courses to England and Scotland, Germany, Austria, Spain, and Ecuador. He directed writing environmental decision cases in the Middle East, and led the writing of a competency based Master's program in Water Resources in Palestine and Israel. The program brought together scientists from four universities and provided the impetus for their further cooperation.

Dr. Vorst was part of a three member team that wrote the articles of organization for the International Center for Sustainable Agriculture (CIDES) located in Panama City. CIDES is a Pan-American organization with government and NGO membership from North, Central and South America, whose mission is to promote and support sustainable development of agriculture and natural resources. Dr. Vorst is on their Board of Directors, and on the nominating committee. Through CIDES he serves a broad range of people, including government leaders, Panama Canal Authority personnel, and university faculty and NGO personnel.

Within the ASA and CSSA, Dr. Vorst served or chaired numerous committees, including Div.A 1, Resident Education, CSSA Crop Science Teaching committee, and committees such as speech contest, scrapbook, media review, and others related to undergraduate education. As an active member of the National Association of Colleges and Teachers of Agriculture he was first chairman of their Media Review Committee. Dr. Vorst has also served on CSREES Departmental review committees at Iowa State, Arkansas and Missouri Through Purdue's Professor in the

Classroom program, Dr. Vorst has talked to high school classes on agronomic topics and ethical issues facing agriculture. He also made presentations to grade schools on crop growth and grain production

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Membership

Member, Sigma Xi

Member, Gamma Sigma Delta

Member, Phi Delta Kappa

American Society of Agronomy

Crop Science Society of America

National Association of Colleges and Teachers of Agriculture (NACTA)

American Soybean Association

Listed in American Men and Women of Science

Indiana Academy of Science

Danforth Associate

Council of Agricultural Science and Technology (CAST)