

Blazing a Trail: MSU's Graduate Program in Industrial and Organizational Psychology

With a long-standing and distinguished reputation in the field, the Industrial and Organizational Psychology graduate program at MSU is at the forefront of research and applied study, and it is the highest ranked graduate program of its kind in the nation, according to [U.S. News and World Report](#). With twenty graduate students and eight faculty members, the program's size provides a uniquely close-knit environment for students to gain focused experience in their areas of concentration.

Industrial and organizational psychology (or I/O psychology) covers two broad domains. The first domain focuses on the individual, in particular how the characteristics of individuals affect performance and behavior in an organization. Understanding individual characteristics translates into organizational practices such as personnel selection, training, recruiting, and other ways of matching a person with an organization. The second domain deals with a variety of organizational phenomena and has a more social emphasis. Its focus is on interpersonal relationships, teamwork, leadership, and workplace attitudes. MSU's I/O Psychology Program has long been committed to representing both domains, offering a broad perspective of the field for its graduate students.

The graduate program provides Ph.D.-level training to students intending to become either faculty or researchers in corporations, consulting firms, government, education and other areas. For Department Chair and University Distinguished Professor of Psychology, Dr. Neal Schmitt, "the primary reasons for the program's success are the research productivity and the dedication of its faculty and students." Because the program focuses on psychology as it is applied to work environments, objectives for graduate students are fulfilling educational experiences that highlight applications of psychology, collecting research data, and delivering services to various organizations. Recent research projects have been funded by The Ford Motor Company, The Federal Bureau of Investigation, Great Lakes Industry, the Office of Naval Research, and others. Faculty members are able to secure these many and varied projects because of the standard of

research excellence they uphold, which has given their program a reputation known throughout the country.

Because students work with faculty on a variety of projects throughout their tenure in the program, they gain valuable insight into the applications of several different approaches to I/O psychology. According to Dr. Dan Ilgen, John A. Hannah Distinguished Professor of Psychology and Management, "rather than being admitted to the program with a view to working with a particular faculty member, students are admitted to the whole program and are expected over the course of their studies to gain experience across a varied number of activities and concentrations of interest to them." Hence, as a

graduate student in this broad-based I/O Psychology Program, no one is considered to be the student of a particular professor, but rather a participant in the entire program who is connected to many faculty.

Although grounded in general psychology and quantitative methods, as well as in the substantive domains within I/O psychology, this graduate program maintains a unique level of diversity in its project work. Initially, students work with faculty on pre-existing projects. As they become more independent in their thinking and their work, they eventually manage their own projects, the nature of which depends on their

particular areas of study. In addition, each student tailors his/her own program to take advantage of the variety of courses that complement a student's interest; courses such as counseling, organizational development, labor relations, social and ecological psychology, organizational behavior, statistics, and communications.

For Dr. Schmitt, the research questions provide the impetus for industrial and organizational psychology: "In some cases, we may be concerned with workplace design, socially and physically, asking questions about group dynamics and attempting to understand how to put a group together so that they can work together more effectively. In other cases, we may design means of effective personnel selection that would best suit different corporations." For example, in a past General Motors study, workers were evaluated as they



*Dr. Neal Schmitt,
Chair of the Industrial and
Organizational Psychology Program*

assembled toy cars. In this way, I/O faculty and students involved in the project could evaluate worker ability and willingness to work as a team, and also assess whether and to what extent GM workers could recognize errors and correct them. The evaluation of workers' tasks then determined the kinds of abilities that were required to perform those tasks. Finally, an ability measure was created, and job applicants were measured on those abilities. In some projects a battery of ability tests is created to fit a particular job; in other instances, a series of simulated activities similar to what employees actually do on their jobs may be used.

In his fifth year in the I/O Psychology Program, Brad Bell has just been hired as an Assistant Professor at Cornell University's Industrial and Labor Relations Program. He sees the professional success that he achieved as directly related to the atmosphere of research and publishing that is the core of the MSU I/O Psychology Program: "Employers want to see that you've been active, that you've had presentations at conferences, and, if you're interested in applying for an academic position, they want to see that you have published in at least one top-tier publication in the field." For Bell, the various projects on which students collaborate with professors make it possible to build the kind of resume that makes MSU students highly competitive. "These projects provide a couple of things: resources and publishing opportunities. In a laboratory setting, for example, the professors have provided the resources. They get the projects, and they provide us with key opportunities for research."

He feels that the project that gained him the most attention from employers is the project funded by the Navy, overseen by Dr. Steve Kozlowski. This ongoing study that Bell has worked on for five years was created in response to the erroneous downing of an Iranian airbus by the USS Vincennes, due to a lapse in communication between the airbus and the ship. This project involves a computer simulation to examine training techniques that need to be in place to train workers to read and interpret information on radar and then respond to that information quickly and accurately. In a laboratory with several networked computers, student volunteers perform an air traffic controller type of task, where information is gathered on aircraft. Students must process constantly evolving situations and do so rapidly and accurately. Results of this type of research help us to understand human behavior on complex tasks and shed some light on how skills are developed in jobs of interest to the Navy. For Bell, the opportunity to work on such projects provides both practical and academic experience. "We look at ways to train people to be more effective; then we look at additional research questions related to our field."

For graduate students focused on applied studies, the ability to work on projects that provide direction and employment options for a non-academic position is invaluable. Although presently interested in an academic career, Ph.D. student Lauren Manheim is currently working on a study for the College Board, which gives her the opportunity to gain applied

experience in selection and testing. Her project focuses on gathering information on college student characteristics and student performance. This information serves a variety of potential uses, including academic counseling and university admissions. Some information gathered deals with multicultural awareness and tolerance, broader student values or characteristics that are increasingly important to university admissions. She is working on developing a situational judgment test, which is rarely used in the educational setting but



Brad Bell demonstrating the radar simulation project.

is becoming a very popular tool in the workplace to evaluate job candidates.

There are approximately 800 undergraduate students participating in the study, coordinated with Dr. Neal Schmitt and Dr. Fred Oswald. Students will be followed for a year, and perhaps beyond that, to examine whether situational judgment tests and other new tests designed by the MSU researchers are valuable additions to traditional standardized tests when it comes to predicting a variety of dimensions of college success. Lauren explains, "Working with freshman students, we are trying to create a new type of test that asks questions about their past experiences that might relate to college, such as how many books they had on their bookshelf growing up. We also test for situational judgment by presenting them with difficult situations, which they might encounter in college, asking them questions about how they would handle these situations." Among other things, the study evaluates whether the students can determine an acceptable response to complex academic situations. Through projects like this one, the graduate students learn skills that help them work in applied settings on important applied problems like this one. Manheim concludes, "I feel that here at MSU there is a balance between research and applied work; I'm very involved in research because I am developing skills that will give me career options in academics and in industry."

The faculty's dedication to the field and the small size of the program together provide for significant personal interaction with students. According to Dr. Ilgen, this interaction is one of the most rewarding aspects of the program. "Our graduate level seminars are small—five to ten students—so there's much more give and take. In such settings, the faculty learn at least as much as the student." In addition, the faculty foster an atmosphere of open dialogue with students, emphasizing their future roles as colleagues in the field. Dr. Ilgen relates these environmental factors to the team-oriented atmosphere of the projects and program. "You have to work as a team, develop a way to do research, to conduct the research, so it is really a team effort. On these projects, we also often have undergraduates working with us.

We've tried to encourage the kind of culture that is created in this group-oriented process." This emphasis is carried over into areas of extra-curricular activities. "For example, when we have a job candidate or a speaker visiting the program, it is not uncommon for the reception—held at a faculty member's home—to include faculty and graduate students. So, in a sense we really try to foster an atmosphere in which big distinctions are not made between faculty and graduate students."

One other area in which the community spirit of faculty and graduate students becomes apparent is the annual

Society for Industrial and Organizational Psychology Conference (SIOP). This is a meeting in which the most advanced research in industrial and organizational psychology is presented. As a leader in the field, MSU's I/O Psychology

Program continues to maintain a conspicuous presence at the event, often with the largest group of attendees and always with the highest number of presenters, including both faculty and graduate students. Students are able to demonstrate the variety of projects on which they work by presenting in several areas at the conference. According to Brad Bell, a recent presenter, "it is not unusual for our students to present several projects at the SIOP conference—that's an indication of the fact that if you come here and work hard, there are so many opportunities to present pertinent research." In addition to

sharing their research at the conference, over the course of the last decade MSU faculty members have served as officers in the SIOP administration. Both Dr. Neal Schmitt and Dr. Dan Ilgen are former presidents of SIOP, and MSU Professor of Psychology, Dr. Ann Marie Ryan, is President-Elect. For students this represents the dedication of the faculty to maintaining an active status in the professional society and the industry—the benefits of which will continue to add to the quality of the students' experience and the quality and reputation of the MSU I/O Psychology Graduate Program. ❖



Dr. Dan Ilgen, John A. Hannah Distinguished Professor of Psychology and Management

Faculty of the Industrial and Organizational Psychology Program

Dr. Rick Deshon

Email: deshon@msu.edu

Dr. Steve Kozlowski

Email: stevekoz@msu.edu

Dr. J. Kevin Ford

Email: fordjk@msu.edu

Dr. Fred Oswald

Email: foswald@msu.edu

Dr. Dan Ilgen

Email: ilgen@msu.edu

Dr. Ann Marie Ryan

Email: ryanam@msu.edu

Dr. Linda Jackson

Email: jackso67@msu.edu

Dr. Neal Schmitt

Email: schmitt@msu.edu