

GRADUATE AG RESEARCH SPOTLIGHT



Lisa Keefe

"I have some experience teaching college students, and I really feel for those newly minted PhDs who don't have training. I flat-out love the idea of being able to help them by making a really great tool for them to use —no training needed."

—Lisa Keefe, PhD candidate in Youth Development & Agricultural Education

THE STUDENT: Lisa Keefe hails from Waterloo, Iowa, the daughter of a police officer. She worked three summers in what she calls "the perfect job for a teenager," as a soybean cross-pollinator at Pioneer Soybean. Her family's variety of pets sparked her interest in studying animal science. After graduating from Brigham Young University, Keefe came to Indiana as a nurse at Purdue's Veterinary Teaching Hospital. For three years on the clinical floor, she taught skills in dermatology and internal medicine.

WHY PURDUE: "I didn't want to be a vet, but I was interested in the science of it," Keefe says. After completing a master's degree in veterinary epidemiology at Purdue, she decided to pursue a doctorate. In her first two years in comparative parasitology she discovered, "I absolutely loved being a [teaching assistant] for veterinary student labs; but I hated sitting in the lab by myself." She sought out Neil Knobloch, associate professor of Youth Development & Agricultural Education, who helped her chart a course toward a teaching career in a life science field.

THE RESEARCH: Keefe's research explores the effect of Learner Centered Teaching (LCT) methods on student self-efficacy. She focuses specifically on online games or simulations designed to help undergraduates in introductory courses grasp some of the most

difficult concepts in food sciences and plant sciences. "Students need to figure these out early or they will drop out," Keefe says. She evaluates the games' effectiveness through questionnaires that she created and validated for reliability. She also has interviewed plant sciences students about the experiences and people that helped build confidence in their skills.

THE VALUE OF AN ADVISOR: After nearly three years of research and writing, Keefe will defend her dissertation in June. She credits Knobloch with helping her "get on the right path to studying how people learn." And standing meetings with him keep her on track and prompt her to ask, "What have I accomplished this week?" Keefe tries to take a break from schoolwork on Sundays, when she enjoys reading, horseback riding and walking trails with her beagle-pointer mix Mimsy.

WHAT'S NEXT: Keefe envisions a future as an "education scientist"—a liaison who takes new tools into the field. "Education research will not move practice forward until someone can take it to the people who need it," she says. "I also enjoy the idea of being able to help with a specific course problem with a targeted solution."