

### KidThink Research Explores Value Of Pretending

Children have to learn a lot to succeed in our complex society, and one of the most useful skills they can master early is "inhibitory control" -- that's the ability to resist an inclination to act and instead choose to exercise restraint. "People with really good inhibitory control are better able to stick to a budget and a workout, anything that involves willpower," says Jennifer Van Reet, Ph.D., a developmental psychologist at Providence College. Mastering inhibitory control leads to good educational outcomes and good health. "Really getting those skills at age 4 seems to be key to setting you off on a good path," says Dr. Van Reet.

In her KidThink lab at PC, Dr. Van Reet and her students are exploring how young minds develop inhibitory control, especially in relation to pretending. "I think pretense is one of the most amazing cognitive processes we have as humans," says Dr. Van Reet. "It requires you to know about the real world, but also requires you to create an alternative to that real world, and to keep in your mind that one is real and one is not, and maintain a boundary between those two worlds. It's really an amazing ability, yet kids even as young as 1 and 2 can pretend, and they don't get confused -- they are able to keep real and pretend separate."

Dr. Van Reet suspects that children who are good at pretending, are also good at inhibitory control. Her research centers on exploring the relationship between those skills, and how that relationship changes as children grow. This summer, with INBRE support, Dr. Van Reet and her students conducted research on inhibitory control in children of various ages. "We're looking at kids in preschool, 3rd to 5th grade levels, and also undergraduates to see how certain mental processes change over 15



Dr. Jennifer Van Reet, Providence College

years," she said. "The whole goal of my field is to chart the development of cognition over a long time span."

The researchers test the subjects' reactions to various questions, using a sophisticated computer-based protocol. "We'll tell them a story, then ask questions about it, and measure their response in fractions of a second," Dr. Van Reet said. "The INBRE funding has enabled me to buy some of the software I needed to do these really precise measurements."

Already the team has preliminary results that show a difference in response at different ages. "We had a really productive summer," Dr. Van Reet said. Four undergraduates, supported by INBRE funding, worked in the KidThink lab -- Christina Lavigne, Alex Male, Cristina Taylor, and Katie McNulty. "They essentially run the lab," says Dr. Van Reet. "They schedule, they test the kids, they work with the data, and they analyze the data. We also go to the Providence Children's Museum once a week and conduct tests there. We go to farmers markets and fairs and talk to parents, to recruit participants for our study. We look for a diverse sample of normally developing kids. It gives students a great experience about what research is."

Dr. Van Reet joined the PC faculty, an assistant professor, in 2008, after earning her doctorate in developmental psychology at the University of Virginia. Last year, she was funded with a one-year pilot grant from INBRE, and in May she was awarded two years of research support. "I started working in a research lab as a sophomore in college. That lab was run by a female scientist, who was a great mentor to me. That's how I got bitten by the science bug, and that's why I'm really glad to be working with undergrads," she says. "I was lucky to start in research so young, and I just never stopped. Every question you answer raises about 10 more. It's never stopped being fun."