

# Economics undergrad asks: How much do parents value education?

*Part of a series profiling undergraduate researchers provided by University of Pittsburgh Office of the Provost.*

## By Niki Kapsambelis

Anyone who has ever read a real-estate advertisement knows that good schools are a strong selling point for people in the market for a new house. But just how much is a quality education worth to the average homebuyer?

That's the question senior economics major Joseph Stauffer hopes to answer with a project he undertook in the spring as part of the Arts and Sciences undergraduate summer research program through the Office of Experiential Learning.

By comparing housing prices in Pittsburgh's city school district, which was recently rezoned, Stauffer hopes to learn whether prices increased when houses were reassigned to better schools as measured by such statistics as test scores and school disciplinary measures. The idea came to him during his junior year, when he took a public finance class from Assistant Professor Mark Hoekstra and learned about the concept of hedonic pricing, which measures the economic value of surrounding factors — such as a good school — on a marketed good, such as a house.

"I was sort of naturally interested in housing prices and the housing market, so I wanted to do something along those lines," says Stauffer.

The problem with answering that question is that housing prices can also be affected by other factors, such as location in a good neighborhood. The city's school reassignment offered a rare opportunity to distinguish the effect of a school on housing prices from the neighborhood effect, the latter of which did not change.

Stauffer brought his idea to Hoekstra, who agreed to serve as his adviser with the expectation that Stauffer would produce something of publishable quality.

What the two didn't anticipate was just how large an undertaking the project would become. Obtaining numbers from the school district and Allegheny County's property assessment database involved a lot of patience and legwork.

"You've got to be persistent when you do this sort of thing, and he's done that," says Hoekstra. "The hard part is figuring out what the right way is to answer this question, and getting the data to be able to do it."

However, "he's a very bright student; he's not afraid to call people and learn



**Undergraduate researcher Joe Stauffer and Economics professor Dr. Mark Hoekstra investigate whether good schools influence homebuyers' decisions in the city of Pittsburgh.**

"He's a very bright student: he's not afraid to call people and learn things he has to learn in order to get it done."

— **Dr. Mark Hoekstra, on undergraduate researcher Joe Stauffer**

things he has to learn in order to get it done," Hoekstra notes.

For example, Stauffer learned new statistical software and techniques for navigating a new database; located census data; and factored in crime rates. After mastering those tools, he had to learn how to align that information with what he obtained from the schools, which wasn't always a perfect match.

"You've got to take the initiative to figure out who has the data you need," says Hoekstra. "You need someone to be a self-starter ... it's been a pleasure to supervise him."

Though Stauffer originally planned to finish his research over the summer, he now hopes to complete it by the end of the fall semester through independent study.

"I have my fingers crossed," he says. "Even before the project started, I didn't realize how messy the world was ... I knew this was going to be a complicated

project, but at the same time, it has taken on a life of its own."

He arrived at Pitt from his hometown of Kane, Pennsylvania, with the intention of completing the neuroscience program. But after taking a few economics classes, he decided that was his true calling.

He plans to look for a job after graduation, and work for a little while before determining whether he'll attend graduate school.

In some ways, the obstacles he faced have proven quite valuable. Stauffer believes the problem-solving skills he has developed to overcome various setbacks will serve him well and have given him confidence. When he finishes working with the data, he will be writing his results and conclusions in a paper. And, come hell or high water, he is committed to seeing it through.

"I'm just really interested in finding out the answer," he says. "I would hate to come this far and not finish."

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