

EDUCATION COMMISSION

OF THE STATES

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By: Jillian Ives November 2020

## **Jeanne Funk**



## **Personal Story**

Jeanne Funk stands at the front of the classroom and asks students to predict what the quadratic equation on the board would look like as a graph. After the first few examples, the energy level picks up in the classroom as students shout out guesses and make shapes with their hands: "u-shape" and "rainbow-shape." As a professor of mathematics at LaGuardia Community College, Dr. Funk describes her teaching style as "a mixture of lecture and conversation and a little bit of one-on-one."

During her doctoral studies, she worked as an adjunct at Bronx Community College, where she learned the importance of giving students time on task, meaning giving students opportunities to work through math problems, like graphing quadratic equations, so they can practice while they've got her in the classroom to help when they get stuck before practicing on their own at home.

It is a constant challenge for Dr. Funk to balance the varying math interests of the students in her courses some of whom want algebra to be their terminal math course and others who need it as a foundation for the calculus sequence. Dr. Funk wants all of her students, regardless of their math goals, to complete the course understanding that math is not about memorization, but rather is developed from simple rules. She explains why things work the way they do when she is teaching and uses hands-on math for students to explore these rules on their own without requiring a depth of prior mathematical knowledge. Dr. Funk finds exploration to be an important aspect of math because she wants her students to know that math is still being developed, so they could help advance the field.

Her desire for students to understand these foundational disciplinary ideas stems from her own experience as a student. Dr. Funk started in the hard sciences and never found math to be that appealing until she studied theoretical mathematics as an advanced student. She found theoretical mathematics to be a lightbulb moment. She then understood the logic of math and decided to pursue her PhD in mathematics.

Dr. Funk received her doctorate in mathematics from the Graduate Center—the City University of New York's PhD granting institution. Dr. Funk takes pride in teaching at a community college because she gets to make "a difference in a way that you might not have a chance to at colleges that aren't open admission." She finds teaching at LaGuardia to be meaningful because she gets to impact the lives of many students. LaGuardia's student body is very diverse, with students from over a hundred countries with over a hundred first languages. Working with such a diverse group of students, Dr. Funk has continually tried to develop and grow as a teacher through professional development, including becoming involved in curriculum design and developmental mathematics reform.

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## **Policy-Related Overview**

Dr. Funk joined LaGuardia in 2012, when the institution was just beginning to develop corequisite courses in statistics and English. In 2014, the institution decided to design an algebra corequisite course, using a single-course model. In this version of corequisite, the basic skills or pre-requisite material is built into "an extended hour course that's all taught by the same faculty member, as opposed to extra support where you might have tutoring aside from the regular course."

After the initial pilot in spring 2015, the faculty member who was the lead on the initiative left the institution and Dr. Funk was put in charge. She ran a larger pilot in fall 2015, while simultaneously conducting professional development for faculty in the pilot. "The professional development was a big piece of it because it allowed us to give people space to share pedagogy ideas, ideas about how to support students with basic skills placement in this very intense course, because seven hours a week is a lot of math," Dr. Funk said.

The professional development was key to making a successful algebra corequisite course. It was in the professional development dialogues that the faculty decided that a pre-requisite skills integration model was the best approach. This model is also called "just in time remediation," meaning the prerequisite material gets put in where it becomes relevant to the college level course. Dr. Funk spoke of the importance of professional development as a means for faculty to have input on the course design and thus foster faculty buy-in. Having more faculty willing to teach the course using the new curriculum was key to scaling up.

Dr. Funk believes the algebra corequisite course helps foster student success because it provides the prerequisite skills when most relevant in the semester, and helps students earn college credits earlier. Based on pass rates, the corequisite course has shown that everyone benefits to a degree.

More recently, LaGuardia has created and scaled up a corequisite version of the quantitative reasoning track. Dr. Funk is working on redesigning the algebra corequisite course to use Open Educational Resources. One thing she has appreciated throughout the process of adding new tracks is the funding from organizations like Strong Start to Finish. Scaling up a program involves professional development, which takes resources to pay people for their time. Having this funding at LaGuardia allowed for communal effort to make developing and scaling up corequisites successful.

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