

# A Mathematician Runs for Political Office

As I sit down to write this essay, just over a week has elapsed since my narrow defeat in the 2008 election. I was the Democratic nominee for State Representative in the (north suburban Chicago) 17th District of Illinois. Not many mathematicians run for office, but as interest in energy, environmental, and technology policy increases, more people with scientific backgrounds are considering this professional transition. In Illinois, I'm happy to say that this is a bipartisan phenomenon, thanks to Democratic Congressman Bill Foster and Republican State Representative Mike Fortner, both particle physicists. Given my vantage point, I thought it might be useful to offer some insights and suggestions for mathematicians considering politics.

**1. You have an important advantage.** You've probably been struck by how often candidates use the phrase "solving problems". This is partially because "solving problems" is a kind of antonym of "partisan bickering", making it a particularly salient concept in 2008's Obama-driven political culture. There's another reason, though: when done correctly, policymaking involves solving technical problems by analyzing data and predicting consequences of various actions. This data-driven approach to policymaking is sorely missed today. (And while the Bush administration elevated throwing out the data to a grotesque art form, this practice did not begin in 2001 and is unfortunately not limited to the executive branch of government.) If you're reading this magazine, chances are you actually solve problems for a living; in other words, you're more justified than almost anyone in calling yourself a problem-solver. Voters get this, and they like it.

**2. You have another important advantage.** If you're reading this magazine, you're also probably a teacher. That means you speak in public several days a week. Moreover, you do so in circumstances far less favorable than those confronting politicians most days (they talk for ten minutes, not an hour, about subject matter that—and it pains me to say this—most people find less boring than mathematics). By Election Day, I'd become a pretty good political speaker, based only on my experience in the classroom, my passion about the issues, and a lot of hard work. You can too.

**3. You have yet another important advantage.** Your schedule is flexible. The number of hours you're in class is quite a bit lower than most people's time commitment. Your summer vacation is auspiciously scheduled shortly before the first Tuesday after the first Monday in November—squeeze everything you can out of it. Naturally, you have other duties, like research and class preparation, and you need to fulfill those duties responsibly. Just make sure you don't spend time on them while voters and donors are awake.

**4. And you have one more important advantage.** Running for office is really hard and involves tons of work

and learning about a billion new things. If you're reading this magazine, you've probably always been good at homework. Your campaign (as well as the preparation time you spend figuring out how your campaign will work) is a great time to dust off that skill.

**5. But don't be a big jerk.** When I announced my candidacy, one of my mathematical colleagues expressed concern that it would be hard to move out of mathematics, where everyone was "really smart". Aside from being an obnoxious sentiment, it's totally wrong. There are reasons I've missed being a mathematician, but access to bright people and interesting conversation sure isn't among them.

**6. In fact, if you do this correctly, you'll learn more than in any other phase of your life.** A political campaign is an extremely complicated machine, made up of dozens of moving parts and thousands of people. You'll encounter more different ideas and tasks than you can possibly imagine. It's scary and difficult, but truly inspiring.

**7. One thing you'll learn how to do is cut corners.** A campaign inevitably involves a lot of corner-cutting. Over 70,000 voters reside in our district, and 52,418 of them cast a ballot in my race. The ideal campaign would involve talking individually with each one for at least half an hour. Obviously, I didn't have 25,000 hours. The main purpose of a campaign is to short-circuit that process but still deliver substantive communication.

**8. You'll also get a visceral education about long tails.** If you're running in a district smaller than a Congressional district and you want to win, then you'll knock on doors. Lots of them. (I knocked on over 20,000.) This will be one of the most valuable experiences of your life—you'll learn so much about your community and human nature. But because of the law of large numbers, you'll also have a fair number of extraordinary experiences. Besides the naked man in the wheelchair (really) and the horrifying racist, you'll also encounter your fair share of human stories of struggle. You'll find yourself hugging, laughing, and crying with a lot more strangers than you can imagine. It's truly uplifting.

**9. But never forget this is still politics.** When I began running, some friends worried that I was entering this slimy world of character assassination. I replied "Sure, that's how politics looks on TV, but I'm not running for president. A local campaign will be much more civil." Just days before the election, a letter was sent to voters leveling completely fabricated accusations, urging recipients to vote for my opponent, and describing such an action as "a vote against the very worst in politics". The letter concluded by asking people to call me to express their outrage, and listed my cell phone number.

**10. Speaking of my cell phone number,** it's 773-383-6774. I hope you'll consider running for office, and if you do, please call me. I'd love to help! (Unless you're a Republican, in which case Fortner would probably be a better bet.)

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