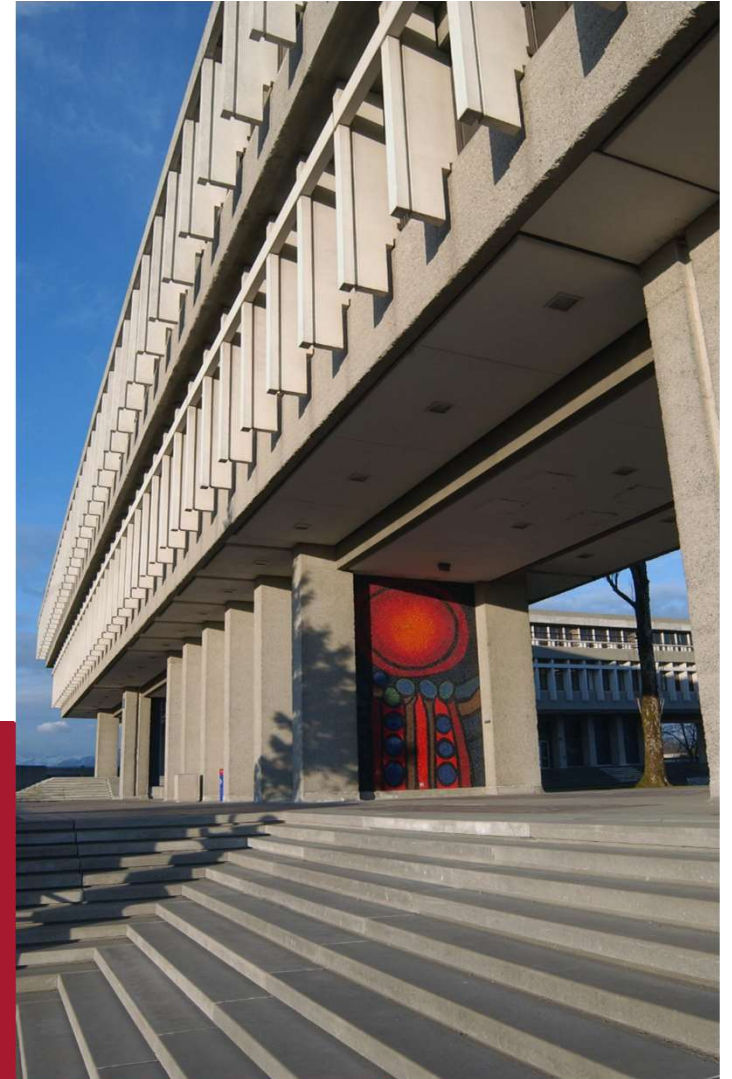




# Tensions in the Role of Mathematics Coaches

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(AN UNMATCHED LEFT PARENTHESIS  
CREATES AN UNRESOLVED TENSION  
THAT WILL STAY WITH YOU ALL DAY.

<http://xkcd.com/859/>

North American school districts are looking to coaching as a model of professional development where teachers can learn in the context of their schools and their instructional practice.

As such, they have begun placing mathematics specialists in their schools to work directly with practicing teachers.



# Mathematics Coach

- mathematics specialist, support teacher, lead teacher, learning coach, numeracy specialist
- a mathematics coach would have a deep understanding of mathematical content combined with pedagogical expertise and strong interpersonal skills
- usually they are former classroom teachers, recognized for their abilities and promoted from within their district



# Mathematics Coach

- provide ongoing professional development of the inservice teachers in their districts

*“by advocating for their change, nurturing their performance, advancing their thinking, increasing their mathematical understanding, and saluting their attempts”* (Campbell & Malkus, 2011, p. 459)

This is a varied, demanding role that Campbell and Malkus (2011) suggest the profession does not understand and is only beginning to examine.



## Tension

- byproduct of teaching, tensions are described as the inner turmoil experienced by educators as they respond to competing pedagogical demands (Ball, 1993)
- important to note that tensions can be useful for educators in shaping identity and practice (Lampert, 1985)
- tension often propels teachers towards professional development and provides the impetus to improve practice (Rouleau & Liljedahl, 2015)



# Findings

## Tension 1: Being unwelcome in the classroom

*Ray: And I think that teachers are a little reluctant to have people in their classroom and do, sort of team teaching or have someone observe them... that hasn't happened as much as I kind of thought it would or as much as I'd sort of like.*

*Pam: The kind of biggest piece, I think, for us, is how do you support those teachers that are too nervous or too anxious about having someone come in?*

# Findings

## Tension 2: Meeting resistance to change

*Ray: I think the biggest barrier tends to be, as teachers, we've gone through a system a certain way that we can visualize how it looks in the classroom. We've taught that way and we see successes in that, in either ourselves or some students, and we hang onto those successes as sort of validation for doing what we do. And we tend to say, 'Well, those other kids just aren't being successful or just partially successful. They're not working hard enough. They're not trying hard enough. They need to do things differently. They need to change.' And I don't think a lot of teachers are as good at saying, 'Well, what do I need to do differently? What do I need to do to change?'*



# Findings

## Tension 3: Questioning role and ability

*Pam: I've had people that have said to me, I know enough that I don't really need you and I don't understand why the district is wasting money on your job. It's the senior math people, the 10, 11, and 12, that are the hardest to influence and they don't want to be influenced by me. I've been told many times by them that I have not the experience and they are more course-focused and curriculum-focused.*

# Findings

## Tension 4: Working with learning assistants

*Ray: I've got a few things that are sort of happening, but not as deeply as I'd like. One of them is the learning support group in our district. They all work a little bit differently and it's kind of hard to connect with them the way we're set up in the system.*



# Questions

1. General conversation about mathematics coaches
1. Tensions in teaching:
  - What might an absence of tension indicate?
  - Are there useful tensions that we can maximize in PD?

