

Virtual Coaching: Building Beginning Educators' Mathematical Knowledge for Teaching (MKT)

Problem of Practice

- \$\$\$ + Time \neq More Effective Teachers (TNTP 2015)
- Inequitable access and support (Kraft, Blazer, Hogan 2018, Hill & Ball 2005, 2008)
- One size does not fit all (TNTP 2015)

Beginning Math Teachers' Need...

- More Experienced Other (Kraft, Blazer & Hogan 2018)
- Content Support (Rockoff 2011, Hall & Ball 2005, 2008, Lannin 2013, NCTM Principles to Action)
- PCK (Lannin 2013)

What BT PD looks like Now

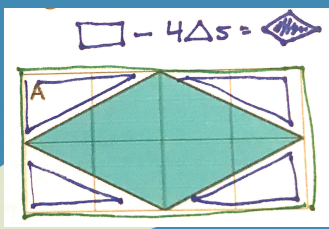
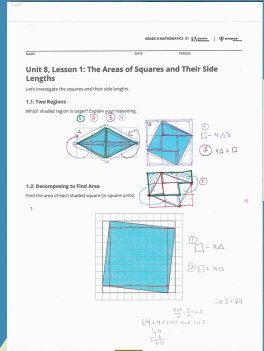
- Varying state policies
- \$\$\$ (TNTP 2015)
- Focus on Teacher Effectiveness (TNTP 2015, Desimone 2011)
- Characteristics of Professional Learning (Gibbons & Cobb 2017)

How my Design Addresses the Problem

- Individualized (TNTP 2015, Kraft, Blazer, & Hogan 2018,)
- Increases access
- Elements of good PD (Desimone 2011)
- Low \$\$ (Kraft, Blazer, & Hogan 2018)
- High MKT = High student achievement (Hill, Ball 2005, 2008)

How can I support building MKT in beginning teachers?

Future Plans



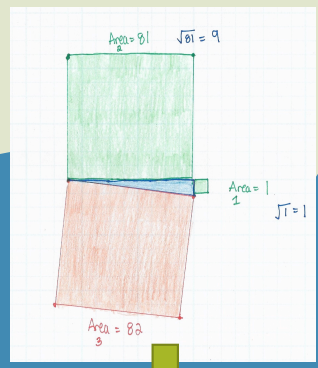
If you know the area of the tilted square, what is the root length, or side length?

First Iteration

- Task
- Monologue
- Low tech

Second Iteration

- Script
- Two Videos
- Wonderings



Third Iteration

- Learning Theory
- Text
- Higher Tech
- Thinking time

“By MKT we mean the mathematical knowledge used to carry out the work of teaching mathematics which includes explaining terms or concepts to students, interpreting student work, judging curriculum resources, and using representations accurately in the classroom” (Hill, Rowan & Ball, 2005, p.373).