

# **Building a System to Prepare Responsible Beginning Teachers at Scale**

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# Three realities

1. National crisis: concentration of beginning teachers; inequities; compounding effect of receiving less skillful teaching
2. The non-professional non-system of building the teacher workforce; lack of diversity
3. Many problems to solve, but we know enough to help teachers learn mathematics for teaching: this is something universities could do

# Three commonly-held beliefs

## COMMONLY-HELD BELIEF

1. The mathematics content that teachers need to learn is easier and often “watered down.”
2. University students who are preparing to teach are less capable than students in other fields.
3. Teacher education programs are “cash cows” for universities.

## ACTUAL

1. The content is different from “advanced” mathematics. Connected to and based in the mathematics taught in K-12 schools, it is actually mathematically complex.
2. They are capable at the sorts of relational and intellectual work central to helping other people learn content.
3. Clinical education is actually very expensive.

# Three connections: Substance, structure, and expertise

1. Mathematics content and practice

1. Mathematics content

2. Designing and analyzing mathematics lessons

1. How mathematics can be unpacked and represented to be learned

2. Instructional practices

3. Enacting mathematics lessons in real time with groups of students

*This would require support for respectful and productive connections among mathematics departments, schools of education or programs, and schools.*

# Three challenges

1. Connections
2. Common shared thresholds of performance for completion and entry to teaching
3. Ownership