Using and Making Records of Practice in Professional Study

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Overview

- Set our work in context in this session, foundations of our interest in records of practice
- What do we mean by a "record of practice," what are some key features, and how might records of practice be used?
- An example of using and making records in preservice teacher education

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A set of premises about learning the practice of teaching

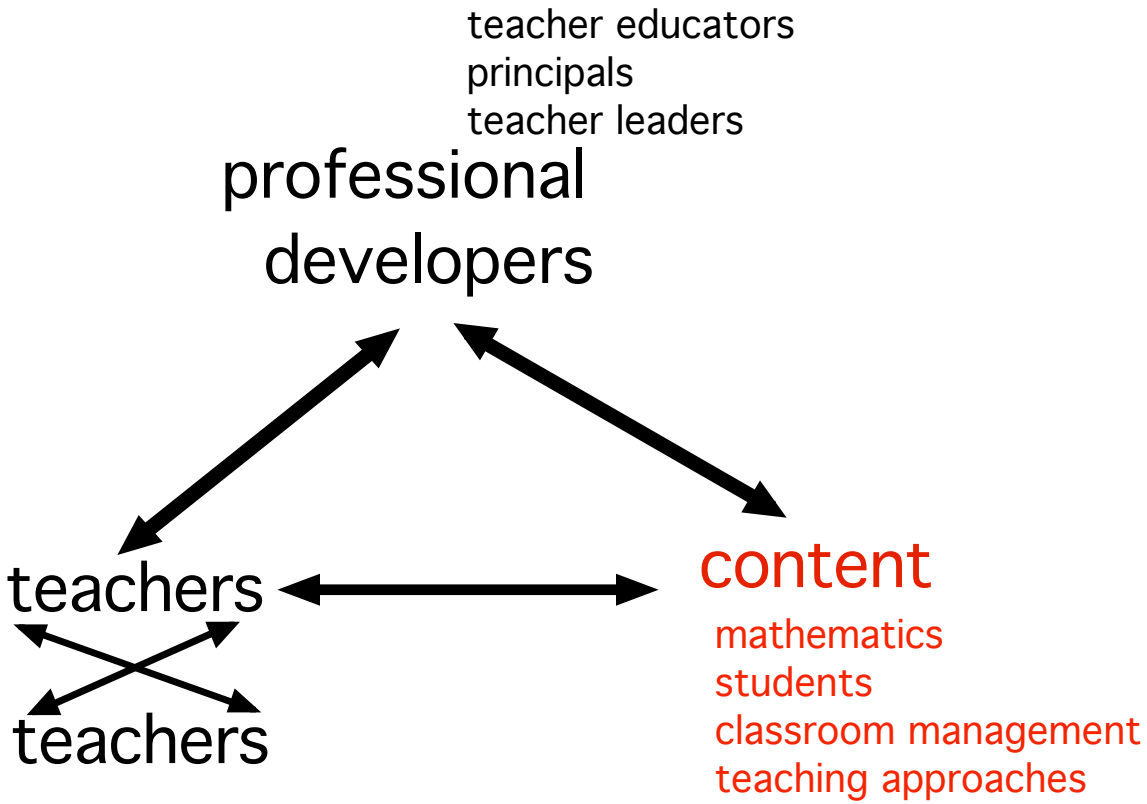
- Teaching is a complex practice.
- Learning teaching occurs mostly from experience.
- Experience is often a poor teacher.
- Teaching is a practice, not a domain of knowledge.

- Needed are forms of "harnessing" experience to make learning from experience more possible, both individually and collectively.

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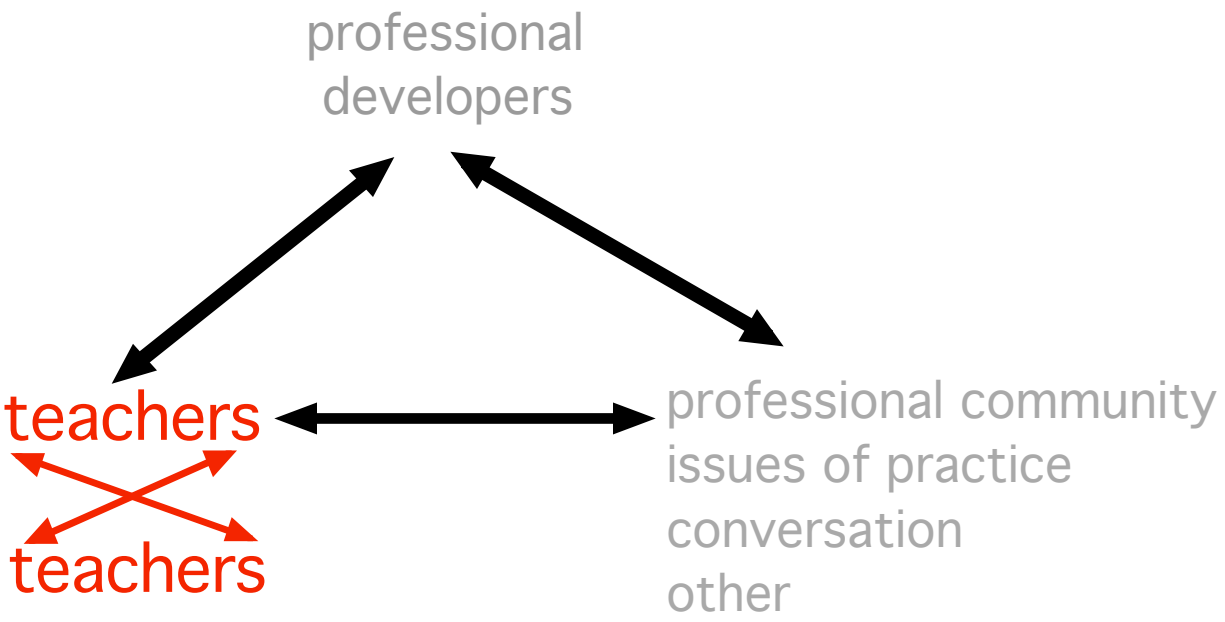
Three perspectives on teachers' professional learning

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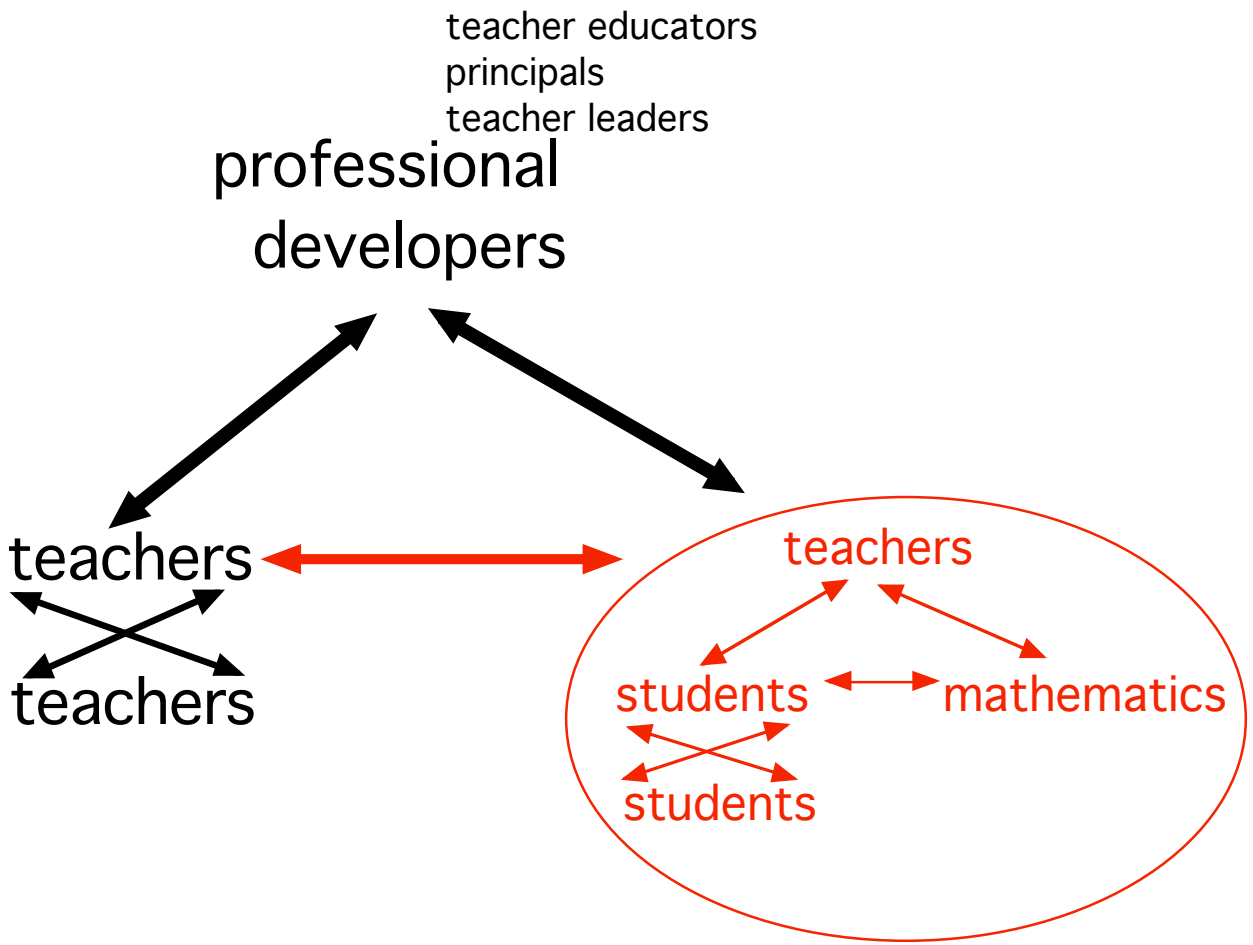
Learning by acquiring new knowledge

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Learning through collegial interaction

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Learning in and from practice

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What are different forms in which practice can be harnessed for professional learning?

- Case studies
- Lesson study
- Records of practice

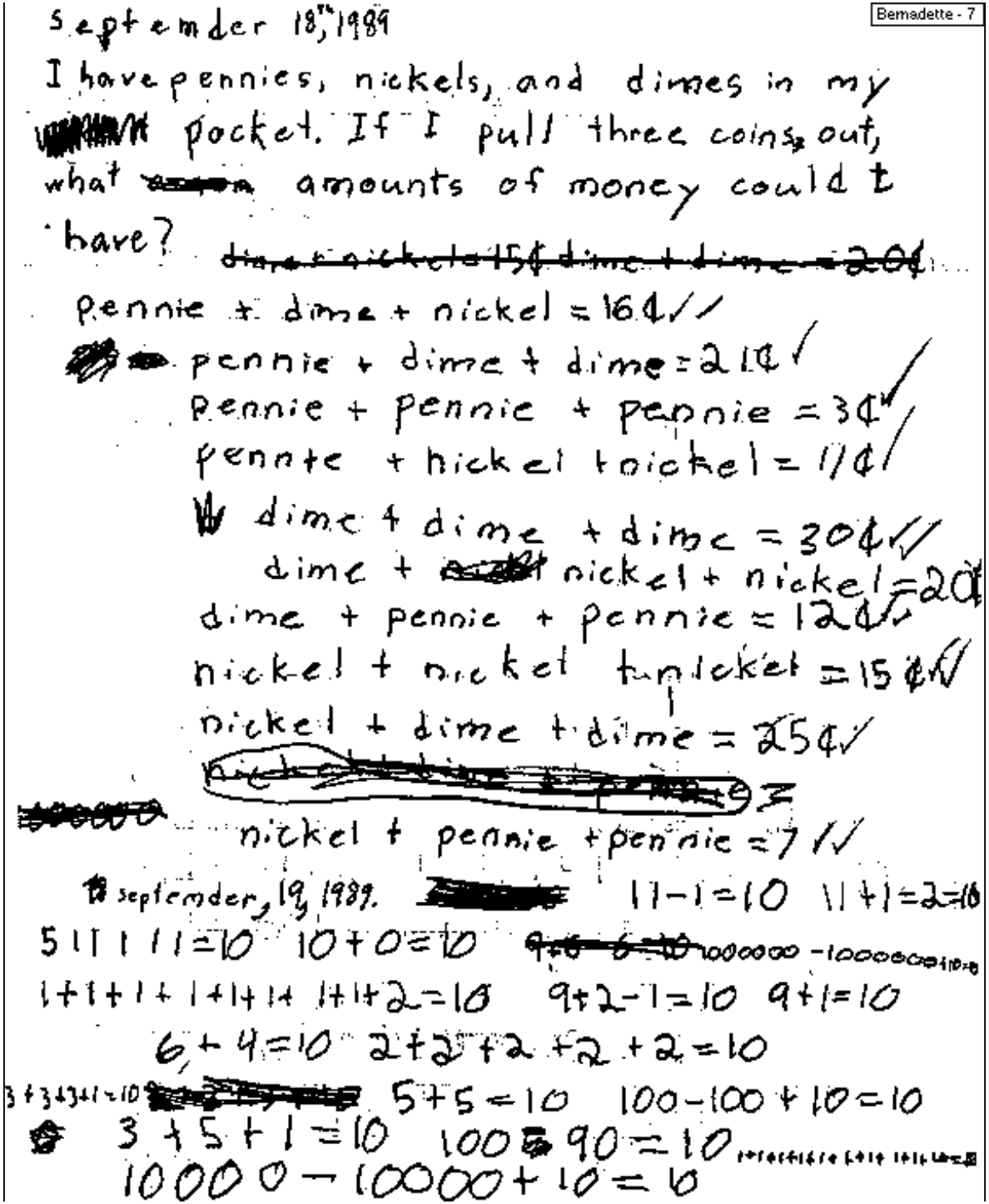
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Records of practice
What do we mean by the term?

- Documentation of practice
- Collection of artifacts of learning and teaching
- Capture primary elements of experience
- Never isomorphic with experience
- Choices : form, focus, frame

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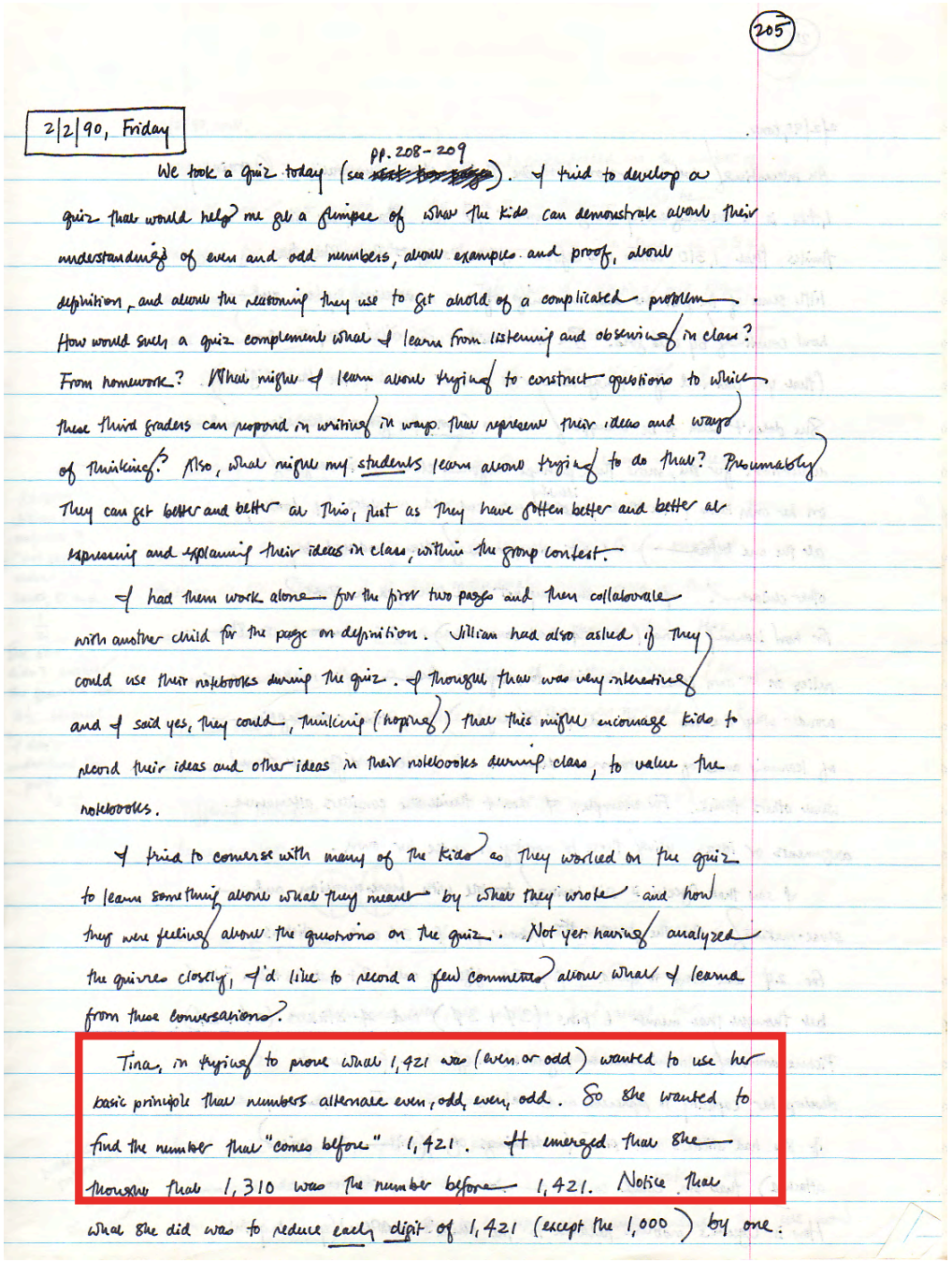
Student work



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Teacher Notebook

Plans
Notes on students reflections



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2/2/90, Friday

We took a quiz today (see pp. 208-209). I tried to develop a quiz that would help me get a glimpse of what the kids can demonstrate about their understandings of even and odd numbers, about examples and proof, about definition, and about the reasoning they use to get ahold of a complicated problem. How would such a quiz complement what I learn from listening and observing in class? From homework? What might I learn about trying to construct questions to which these third graders can respond in writing in ways that represent their ideas and ways of thinking? Also, what might my students learn about trying to do that? Presumably they can get better and better at this, just as they have gotten better and better at expressing and explaining their ideas in class, within the group context.

I had them work alone for the first two pages and then collaborate with another child for the page on definition. Jillian had also asked if they could use their notebooks during the quiz. I thought that was very interesting and I said yes, they could, thinking (hoping) that this might encourage kids to record their ideas and other ideas in their notebooks during class, to value the notebooks.

I tried to converse with many of the kids as they worked on the quiz to learn something about what they meant by what they wrote and how they were feeling about the questions on the quiz. Not yet having analyzed the quizzes closely, I'd like to record a few comments about what I learned from those conversations.

Tina, in trying to prove that 1,421 was (even or odd) wanted to use her basic principle that numbers alternate even, odd, even, odd. So she wanted to find the number that "comes before" 1,421. It emerged that she knows that 1,310 was the number before 1,421. Notice that what she did was to reduce each digit of 1,421 (except the 1,000) by one.

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Videotapes of classroom lessons



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What are some features of records of practice?

1. Relatively close to original events and artifacts as enacted and used
2. Capture natural texture of learning and teaching
3. Highly detailed, concrete and particular, not compressed by theory
4. Makes content visible as it moves and evolves within teachers' and children's work
5. Makes the nonverbal -- time, relations, voice, pace, tone -- available for scrutiny
6. Available for multiple interpretations and uses

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- Provide a medium for study and discussion of practice across divides of experience, language, ideas
- Can function as common referent
- Are highly flexible in their use, and broadly usable

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Uses of records of practice

- Discussion of teaching and learning by: the public, other scholars and practitioners

- Professional study of teaching and learning

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Sorting Out the Issues in Mathematics Education

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Solving Problems in Mathematics Education

1. What are the core problems of U.S. mathematics education?
2. What do people think are the causes of these problems and what solutions do they propose?

3. What are new goals for mathematics education?
4. What might work on these goals look like in practice?
5. What would it take to accomplish these goals?

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IN THIS SEGMENT . . .

What might students be learning?

How do students interact with one another?

How do they deal with the mathematical ideas?

What mathematical learning opportunities do you see?

What might a teacher need to know to handle what is going on here?

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From Policy to Practice



Research
Evaluation of programs
Curriculum policy
Standards and frameworks
Teacher credentialing and hiring policies
Teacher education and professional development
Assessment of achievement
Curriculum
Learning to teach
Teaching and learning

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Practice and Policy



Teaching and learning
Learning to teach
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Research

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