STAFF MEETING DISCUSSION GUIDE · 45 MINUTES

Math Fact Fluency: Should We Retire the Timed Test?

From **10 Minute Teacher Podcast, Episode 962** — Math Games That Build Fluency While Kids Have Fun, with Dr. Jennifer Bay-Williams and Dr. Gina Kling

For: grade-level teams, math departments, full faculty | **Bring:** one deck of cards per 3 people, chart paper | **Episode:** coolcatteacher.com/e962 (16 min)

STEP 1 · Start With Their Own Math Story — 10 min

Don't start with the research. Start with them. Ask everyone to think about one of these — themselves, or a child they know well:

- What is something in learning math that **hurt**? A moment, a practice, a comment that stuck.
- What is something that **helped** you get fluent? Something that actually worked.

Give people a minute of silence to think before anyone talks. Some of these memories are older than they look.

STEP 2 · Think, Pair, Share — 10 min

Pair up. Each person shares their "hurt" story and their "helped" story. Then, together, the pair answers two questions:

- **How are our two stories different?**
- **Where do they overlap?**

Bring it back to the whole group and chart the answers in two columns. You will almost always get both — some experiences repeat across the room, and some are completely unique to one person.

STEP 3 · Name the Point — 5 min

Here is the move. Look at the chart together and say it plainly:

> **The children in our classrooms are as different from each other as we just proved we are.**
>
> The same practice that one adult in this room remembers as harmless is the one another adult remembers as the moment they decided they were bad at math. We cannot assume a practice is fine because it was fine for us.

STEP 4 · Bring In What the Guests Said — 10 min

Play the episode (it's sixteen minutes) or pull these and discuss:

- Jennifer has taught pre-service elementary teachers for thirty years. When she asks them for their worst memory of math, **Around the World comes up over and over.** Does that match our chart?
- Her three reasons to abandon timed tests: they cause anxiety rather than speed, kids under pressure fall back to counting instead of strategy, and the results don't tell you *why* a child missed a fact or *how* they got one right. **Which of those three is the hardest for us to accept?**
- Gina's teacher story: the kids knew their facts during games but not on the timed test — so what was the test measuring? **Have we seen this in our own data?**
- A kindergarten teacher told Gina she used timed tests because five- and six-year-olds "need to learn how to handle pressure." Gina's response was that if that's the goal, take it out of the math classroom. **Where else in our school do kids practice handling pressure?**
- Gina defines fluency as four things: accuracy, efficiency, **flexibility**, and **appropriate strategy use**. **Which of those four can a timed test actually show you?** Gina's own answer on the show was that she questions whether it shows any of them.

“…the key of the games is to make sure they're not about speed, because when students are under pressure to be fast, it blocks their thinking.”

Dr. Jennifer Bay-Williams · Professor, University of Louisville

STEP 5 · Play Two Games (10 minutes)

End by doing it, not discussing it. Break into threes, hand out the decks, and play **Salute** for five minutes and **Lucky 13** for five minutes. Directions are below so nobody has to look anything up.

GAME 1: Salute — 3 players · all four operations · cards only

1. One player is the dealer. The other two each take a card and hold it on their forehead, facing out, **without looking at it**.
2. The dealer looks at both cards and says the **sum** out loud. (“Sixteen.”)
3. Each player looks at the *other* player's card and figures out their own. If I see a nine and the sum is sixteen, I'm holding a seven.
4. Rotate roles so everyone gets a turn as dealer.

To grow it: the dealer says the **product** instead of the sum, and players work out the missing factor. That's division practice disguised as a card game. There's no winner and no timer — the mathematical work is the point.

Partner version (Jennifer's modification): before kids can use strategies, they need their combinations of ten cold. One player puts a card on their forehead and the partner names the card that makes ten with it. Three on the forehead, partner says seven. Works for doubles too.

GAME 2: Lucky 13 — 2+ players · addition · cards only

1. Each player draws **four cards**.
2. Find the two cards in your hand that add up closest to 13.
3. Your score is how far away from 13 you are. Add to 14? You scored 1. Add to 10? You scored 3.
4. **Low score wins.** Play five rounds.

Every player works their own four cards, so nobody is waiting and nobody is racing. Scale it up to five cards in a hand, or down to Lucky 10 for younger students.

BONUS: Go Fish for 10s — 2–4 players · combinations of ten · cards only

1. Deal five cards each, ace through nine only.
2. On your turn, ask another player for the card that would make **ten** with a card in your hand. Holding a six? Ask for a four.
3. Got it? Lay the pair down. Didn't? Go fish.
4. Play until the deck runs out. Most pairs wins — or just play until the bell.

Gina recommends this one for first grade and early second. Combinations of ten are the gateway to almost every later addition strategy.

Then close with one question:

While you were playing, what could you tell about the person next to you and how they think about numbers?

That answer is the alternative assessment. That's the whole argument in one round of cards.

Optional follow-up commitment

Ask each teacher to name one thing they'll stop and one thing they'll start before the next meeting. Write them down. Revisit in four weeks.

One thing I will STOP:

One thing I will START:

Free printable game boards, recording sheets, and assessment tools (English and Spanish) from Bay-Williams and Kling's companion site: kcm.nku.edu/mathfactfluency — hosted free by the Kentucky Center for Mathematics.

The book: *Math Fact Fluency: 60+ Games and Assessment Tools to Support Learning and Retention* by Jennifer Bay-Williams and Gina Kling (ASCD, 2019).

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