



Stop Saying, "My Kids Can't Do That"

How to Help Your Students Access Grade-Level Math

by Chrissy Allison

How do you respond when teachers say, "My kids can't do that" in regard to grade-level math work? It's a VERY tricky topic -- how to teach grade-level content when students have significant unfinished learning. In this article, I share two questions you can ask in the face of this challenge and several tips based on the action research I've done over the past four years with experts, teachers, and leaders. I also share a FREE resource you can use to help 'bridge the gap' to grade-level math that you can find at www.mindfulmathcoach.com.

One of my biggest pet peeves is hearing teachers say, "My kids won't be able to do that." I feel my body tense up and a small flame of anger start to slowly burn. When this or a similar statement is made within my ear shot, I'm triggered at a deep level. Maybe it's because I feel like I've been underestimated my entire life

so the underdog in me wants to scream out in students' defense. Or maybe it's because I think it means that the teacher is *not* planning to give students a chance to try the task - which feels like they're underestimating their students' abilities.

My fear is that the belief “my kids won’t be able to do that” is used as an excuse to avoid teaching grade level work.

Listen, I understand WHY teachers say this - 100%. It's really hard teaching math when students have unfinished learning - especially in middle school and high school. And in fact, I used to have similar thoughts about my students in the face of rigorous grade-level content. I'd think, “My students aren't ready for this,” or “They still don't understand how to add fractions. How am I going to teach them how to solve multi-step equations that include fractions?” After all, math is a progression and new content won't make sense if they are behind, right?

If that's what you're thinking right now, no worries -- it's what I used to think, too, but you'll definitely want to keep reading with an open mind to hear how my perspective has evolved around this topic, and specifically the impact it's had on the approach I take to students' unfinished learning now. In this article, I'll also share two of the most important questions you can ask yourself in the face of challenging grade-level tasks when you're afraid they're beyond your students' current understanding.

In 2014, I started working at an educational nonprofit as the Director of Math Professional Learning. Our organization worked with schools and districts who served communities with high percentages of students receiving free or reduced lunch. Typically students were students of color, and in most cases data showed that students had a lot of unfinished learning in math.

I came in when Common Core had only been around for a few years, and most teachers and administrators were still trying to understand what the standards meant and what the implications were for their instruction.

To complicate matters, most schools and districts hadn't prepared much ahead of time for the transition and so all of a sudden one year they followed the old state standards and the next year it was college and career readiness standards.

And that didn't go so well. Not only was some content now in different grades, but expectations across the grades were higher and the standards went deeper - not only were students responsible for procedure skill and fluency but with the Common Core and other state's college readiness standards there was a greater emphasis on conceptual understanding and problem solving. So even before day one of the new school year, many educators felt like they and their students were behind.

I always kept this context in mind when I had the opportunity to talk with teachers or join classroom observations with leaders, and over time, I noticed a few things. First, one of the most common and pressing concerns for teachers was the 'gaps' their students had that got in the way of the grade level content they were *supposed* to be teaching. And the most common way they tried to address it was to press pause on grade level material to revisit content from previous grade levels for a few days or even a few weeks before shifting into grade level work.

I understood this approach. In fact, it was something I'd done myself as a teacher -- spend the first few weeks of school 'reviewing' content from the previous year since we always assumed students had forgotten some important things over the summer.



Additionally, we all know that math learning follows a progression. I mean, that's a fact that pretty much goes undisputed. Concepts and skills from previous grade levels create a foundation for future learning.

And so it made sense to me that if students were missing a few rungs in their ladder of learning, then teachers needed to fill those first so that grade level content makes sense when they get to it.

It makes logical sense - If you're about to teach 8th graders how to find the slope of a line and they aren't sure what a proportion is, you know you're in trouble.

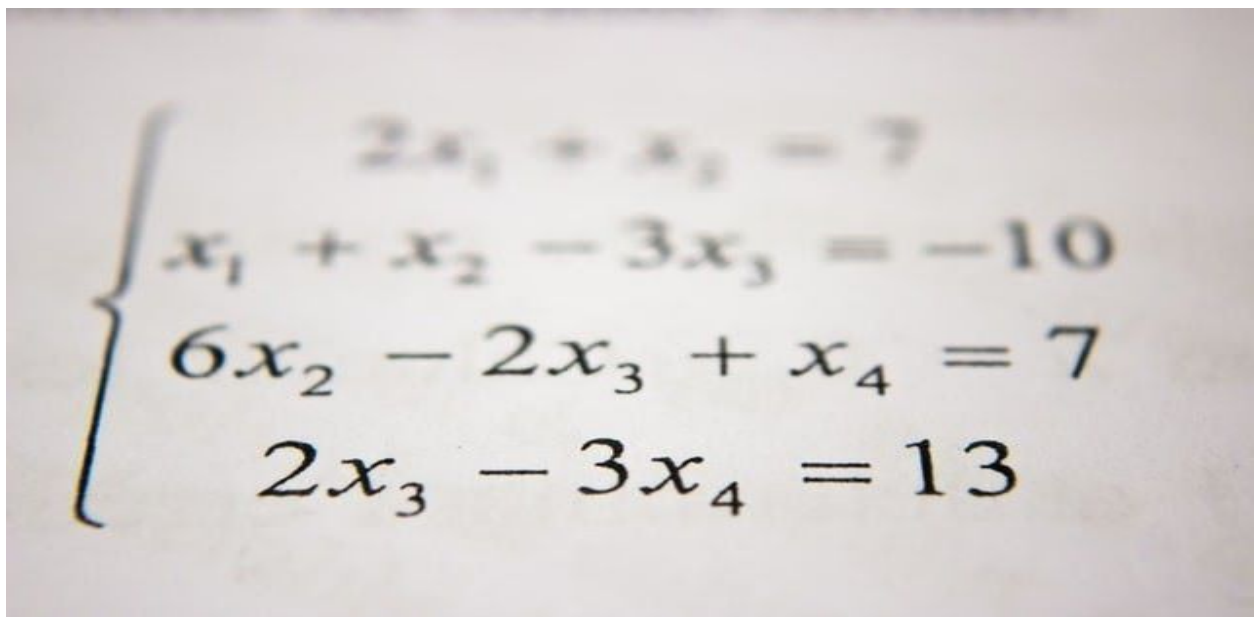
The second trend I noticed was that by and large leaders did not approve of teachers spending time on below grade level content. This didn't surprise me. In the educational nonprofit world I was living in - at least at that time - teaching below grade level content was a no-no. It was a big red flag, and it was seen as a sign of lowering expectations and raising the opportunity gap.

So as we came out of classroom observations, and we identified the standard that the lesson aligned to, if the content was below grade level, instructional coaches and principals took issue with the lesson. And I found myself defending the teacher - because as a former teacher myself, I can't stand it when administrators

observe a classroom for ten minutes and come out with a laundry list of judgments and perceived failures on behalf of the teacher.

I'd say something like, "well we were only in there for 10 minutes, so it's possible this was just the *part* of the lesson where they were brushing up on something that's a prerequisite to grade level work. You know, math is a progression, and in fact coherence is one of the three math shifts. So if students are missing critical prerequisites, I see why they're taking a step back." Or maybe "since they are getting ready to move into the unit on solving application problems with rational numbers, it makes sense to spend a little time reviewing operations with fractions."

And, by the way, all of this is still true. Don't worry - I'm not going to do a bait and switch on you and tell you that math *isn't* a progression or that you should *never* revisit content from previous grade levels. So you can go ahead and exhale if you were holding your breath!


$$\begin{cases} 2x_1 + x_2 = 7 \\ x_1 + x_2 - 3x_3 = -10 \\ 6x_2 - 2x_3 + x_4 = 7 \\ 2x_3 - 3x_4 = 13 \end{cases}$$

In a nutshell, it was common for teachers to raise concerns about students' unfinished learning and to try and address it in the best way they knew how -- and for administrators to focus on getting them to teach grade level content anyway.

I gave teachers the benefit of the doubt because I figured that they know their students best. And again, it bears repeating that the math standards were created as a coherent progression so if teachers feel like they have to take one step back before taking two steps forward, they have a valid concern that needs to be addressed, not denied or brushed under the rug.

I'm going to forewarn you. Here comes the turning point in the story. Stay with me through it. A year or two into my new job, after being in a number of classrooms and talking to teachers and leaders, I realized that I'd rarely seen actual grade level instruction. So while it was true that by dropping in for ten minutes we couldn't make assumptions about students' access to grade-level content during any *one* lesson, I could draw some conclusions about students' access to grade-level content over time. And it was clear that it wasn't happening as often as I'd assumed. I thought the moments of below-grade level content were just that - moments that were being used to help 'bridge the gap' so to speak. But it turned out they were frequently full lessons that took up the entire class period - and sometimes went on for days, weeks, or possibly even months.

Now, I'd say that I had this ah-ha around 2016 or so, and since then, a report has come out confirming the trend I had noticed myself. Another educational nonprofit called The New Teacher Project, or TNTP published [The Opportunity Myth](#) in Oct 2018. To gather data, they followed nearly 4,000 students in five diverse school systems to learn more about their experiences.

Here are a few of their findings: Although students of color and white students have similar success rates when they're given on-grade level assignments, many

students of color were denied the opportunity to even try it. In fact, 38% of classrooms where the majority of students are students of color were never given grade-appropriate assignments during the course of the data collection.

Of the 180 classroom hours in each core subject during the school year, students spent only 26% of their time on assignments that were grade appropriate.

So what this told me was that our situation was not unique. The schools and districts we worked in were pretty representative of what was going on across the country. In all states, in all cities, students were not being given access to grade-level content like we thought.

It's these cumulative experiences and information that have altered my perspective, and ultimately my guidance, for how to support students with unfinished learning -- while ensuring students have the opportunity to engage in grade-level work the majority of the time. I know from my time as a middle school teacher that we can't simply ignore missing skills and conceptual understanding and blindly march ahead as if there will be no impact on students. However, we also can't take all the time in the world to go back to square one and try to teach the entire math progression from start to finish. So what should we do?

Before putting forth any suggestions or guidance, I wanted to understand the challenge more deeply, especially since I was a teacher myself pre-Common Core and I knew it wasn't an apples to apples comparison. So I decided to spend some time analyzing and solving math tasks myself, channeling my former students and trying to figure out exactly what type of circumstances or what type of

content or tasks called for halting grade-level content to review previous skills and which ones didn't.



I spent hours solving problems and making lists of prerequisite skills students would need to solve the problem from start to finish. And the lists were long - very, very long. And at first, it was a little daunting.

But then I had an ah-ha. I realized that I was asking the wrong question. The right question is not “What are all of the skills and understandings students need to be able to COMPLETE the task correctly?” Think about it - if students already have all of the skills and understandings they need to solve a task BEFORE they actually engage in the problem solving process, then what is it we’re hoping they

learn by solving it? In other words, if there is no space between current understanding and the learning goal, what's the point?

Instead, we need to ask, “What is the minimum students need to be able to ENTER into the task and engage in the problem solving process in a meaningful way?” And when I say “minimum” I’m talking about the *most critical prerequisite skills and understandings*. When I asked the question this way, the list became much, much smaller. I was able to pare it down, and it felt WAY more manageable.

So at the end of this investigation, I must admit that I was a little surprised by what I had discovered. I’d gone into the exercise under the assumption that most of the middle school tasks would be impossible for students to do without intervention from the teacher ahead of time. It simply wasn’t true, especially if you ask the right question:

'What do students need to ACCESS the
task?' instead of, 'What do students need
to COMPLETE the task?'

Since that time back in fall of 2016 when I decided to really dig into the topic of unfinished learning, I’ve continued exploring and experimenting with ways to increase accessibility to grade-level tasks using somewhat of an ‘action research’ approach.

First, I partnered with Senior Mathematics Specialist at Student Achievement Partners, Astrid Fossum, to investigate the topic. We spent over a year in deep discussion, comparing notes, and brainstorming the most common pitfalls we’d seen schools fall into when it comes to math intervention. We identified alternatives that align to the math shifts of focus, coherence, and rigor. And we’ve

shared them publicly through Achieve the Core's Aligned blog, in newsletters, and at several conferences, including the National Council of Supervisors of Mathematics Conference in Spring of 2018. Here are links to the blog posts in case you want to check them out.

- [Designing Shifts-Aligned Interventions in the Math Classroom](#) - Aligned Blog Post by Astrid Fossum
- [Addressing Unfinished Learning in the Context of Grade-Level Work](#) - Aligned Blog Post by Chrissy Allison

After that, I started working with a handful of teachers and math coaches one on one to help increase students' access to grade level math in the face of significant unfinished learning. Together, we learned which approaches increased accessibility, engagement, and understanding and which ones didn't. We saw students get excited about the problem that was presented to them and engage in ways they hadn't before - and this was noted by both teachers and leaders.

I'd like to share a few ideas that have come from that work:

1. **"Is the bridge really up?"** First, I'd like to share an analogy with you. I like to use an analogy of a drawbridge to describe the degree to which unfinished learning affects access to grade level content. Imagine you are trying to cross a drawbridge and there is heavy traffic or construction. What will happen? Can you get across? Sure, it's just that your speed will be a bit slower. However, what if the drawbridge was up to let a boat cross? Different scenario, right? The takeaway? Not all unfinished learning has the same impact on students' ability to engage in the task. Sometimes it will be like traffic or construction and cause the students or the teacher or the lesson to slow down. And other times the "bridge will be up" and you'll need to hold on and wait until the bridge is down before you proceed across. So here's the first of two great questions to ask when you're planning for unfinished learning. When you consider what students are 'missing' from previous grades, does it cause the "bridge to be up"? When you do this, I bet

you'll see for yourself what I saw - that "the bridge isn't up" nearly as often as we might think.



2. **“What can I do to ensure all of my students have ENTRY into the task?”** This one is related to the phrase I mentioned earlier that I hope we can strip out of our language once and for all: “My kids can’t do that.” What I’ve realized is that oftentimes when teachers say, “My kids can’t do that” what they really mean is, “I don’t have confidence that all of my students will be able to complete the entire task by themselves with 100% accuracy.” And that’s probably true with any class of students! The problem is that this is the wrong question to ask on the front end of a learning task. Sure, you want all students to solve rigorous problems accurately and independently by the time the state summative rolls around, but that’s a completely different situation than a math task that

you're using as part of the *learning* experience. Instead, let's ask, "What can I do to ensure all of my students have ENTRY into the task?"

In other words, how can you design or launch or scaffold the task in a way where *all* of your students can make sense of the task and begin exploring a solution pathway of their choosing.

What can you do to open the door for students to engage in the task, and to welcome them in?

Remember that we're trying to decide what the most essential skills and understandings are - the most critical prerequisites students need - in order to ACCESS the task, not solve it with 100% proficiency by themselves, the first time through.

One tip I'll offer is that it's worth it to take time to SOLVE the task yourself as part of the planning process. Solve it and list out the skills and understandings students need, then identify which ones truly need to be in place before students can begin the problem vs. the ones that can be folded in during work time or the discussion that follows.

3. The two meanings of ACCESS: A final point I'd like to highlight on the topic of unfinished learning. I alluded to this earlier, but it's worth revisiting, and that's the varying perspectives that teachers and school or district leaders tend to have about the challenge of supporting unfinished learning.

In my experience, teachers tend to overestimate the amount of unfinished learning students have - and the impact

it has on their ability to meaningfully engage in grade-level content, and therefore how frequently and for how long they should teach content from previous grades - while principals and leaders tend to underestimate the amount of unfinished learning students have - and the impact it has on their ability to meaningfully engage in grade-level content, and therefore how frequently and for how long teachers should teach content from previous grades.

The truth is somewhere in the middle, so if you're a teacher and you find yourself on a different page than your instructional coach or principal or vice versa, if you're a principal and you're not on the same page as the math teachers in your building, I hope this episode has helped you to see the BOTH ANDness of the situation - that all students need the have the opportunity to engage in grade level content AND they also need entry and access into the content - which may mean taking some time beforehand to revisit content from previous grades, and more often that that, it means finding ways to address students' unfinished learning *alongside* or *woven into* grade-level content.

Here's another way to put it - we have to take into account BOTH meanings of the word access. First, students need ACCESS to grade level content, meaning that they need consistent opportunities to engage in grade level work. And this should be the focus of the majority of instructional time. Second, we must support students to ACCESS the content - which means we need to make sure students

have an entry point into the task, and that you as a teacher have ensured there is an ‘accessibility bridge’ in place if necessary.

Don’t worry if you aren’t sure yet how to build that accessibility bridge -- I’ve got you covered with my completely FREE resource [10 How To Guides to Bridge the Gap to Grade-Level Math](#)! Click the link for access.



Quick summary before I close this article. I shared a lot of the backstory about how I’ve developed my approach to unfinished learning because I wanted you to hear for yourself how complex this challenge is. It’s not straightforward and there is no one clear path to take. All classrooms are different and both students and teachers have varying needs.

I hope these three tips are helpful as you continue thinking about how you're going to address your own students' unfinished learning:

1. Ask yourself: "Is the bridge really up?" before halting grade level instruction to revisit content from previous grades.
2. Ask yourself: "What can I do to ensure all of my students have ENTRY into the task?" not "What is the laundry list of things my students need to know and do to solve the task perfectly?"
3. Students need two types of ACCESS, so think 'ACCESS & ACCESS' which represents the BOTH ANDness of the situation and the balance of the two. Students need both ACCESS to grade level content and support to ACCESS the content meaningfully through an accessibility bridge.

I've put together a FREE resource you can use to help 'bridge the gap' to grade level math and address your students' unfinished learning. It's a list of 10 strategies you can use in lessons to create an 'accessibility bridge' for your students AND 10 How To Guides (one for each strategy). [Get the guides here.](#)

I want to extend an invitation to you to join me on the journey to provide equitable math learning experiences and outcomes for students of color. If you enjoyed this article and want more from me, head over to mindfulmathcoach.com and check it out!