

Assessments Friday Focus 2026-2027 - AASA Math - How the Standards and Assessment Go Together



Hill, Melanie 0:07

Hello everyone, welcome to today's Friday Focus. My name is Melanie Hill. I'm Achievement Assessment Content Developer for Math and Science with the assessment team at ADE. If you have any questions throughout the presentation, please go ahead and just put them in the chat and we will get to them as soon as we can.

I'm going to wait just a few more minutes just to see if anybody else is joining, and then I will be back.

Okay, again, I'd just like to welcome everybody joining us today and taking time out of your busy schedule to come listen to what we have to say. Again, my name is Melanie Hill. I am the Achievement Assessment Content Developer for Math and Science with the ADE Assessment Team.

I am going to go ahead and turn off my camera as we go through the presentation. I just wanted to introduce myself and say hi to everybody.

Just a reminder that AI note takers will not be admitted into our Friday Focus webinars. A recording and the PowerPoint will be posted on our website of the webinar page following each webinar that we do.

Here's our agenda for today. I'm going to go over our assessment webpage, my testing dates, all of the things you see there, and then at the end of my part of the presentation, I will end and pass it off to Marisa, who is part of our Standards team, and she will go ahead and take it from there.

Again, if you have any questions, go ahead and put them in the chat and we will answer them as we go.

So first here we have what our assessment web page looks like. When you click on assessments, you will see all the assessments that we have at ADE.

When you click on the AASA assessment, we have a whole bunch of things. and lists of resources that are available to everybody. Where you can sign up for committees, testing dates, testing information, calculator guidance, all that good stuff you can find and just click on it as well as the sample test.

As a reminder, here are our testing dates for the Spring 27 assessment window.

If you have any questions, go ahead and again, just put them in the chat. These are

posted on our webpage for your information and are available to you at any time. First thing I'd like to go through is how we actually develop items that we put on our AASA assessment. They go through a rigorous review before they're even operational. So, ADE and Pearson get together and develop items. Those items then go to a committee review process where members, teachers, educators in Arizona meet during the summer and go over all the different types of questions and stuff that we may have, items and give us their feedback on how they think the item is, how they think that it will perform, any suggestions that we, they suggest anything for us to change, and then we bring them back and we make those changes or make those edits.

And then they go through a committee or a community committee review where people from the community, parents and stakeholders get together and they go into it and they check for any bias or sensitivities or anything that we might not have caught.

Once it passes all of those stages, then it will become part of our field test group. They get field tested and we get back data on those items. And then we have another committee of educators and stakeholders who come in and help go through the data and, you know, help us figure out why something may have not performed the way we intended it to perform.

After that, if they get approved through that, then they become an operational item. If they do not get approved and edits or whatever need to be made, those will be made and it will get put back into this into the flow to go to or to be on the field test again after all the changes have been made. Once all the steps are passed, the item will become operational for our exam. It takes two years for an item to become operational on our tests. And operational just means that it's being used to determine a student's score on the assessment.

On our page, we also have our blueprints. Blueprints are what we use to break down the reporting categories into percentages and how we divvy it up on our AASA assessment.

We also have our calculator guidance. Just a reminder that there are no calculators on any unit on math for grades 3 through 6 and are only permitted in grades 7 and 8 on the very first unit.

Next, we have our item specs.

When we click on the plus sign for item specs, the menu drops down.

and you can pick which grade you would like to look at, and then it will open up

directly to that grade.

Yeah.

Insider item, insider item specs, there is a lot of good information. One part being the item formats or the item types that we have on our AASA assessment. That's really hard to say when you have to say it a bunch of times. I'm sorry.

Um...

Each section of the item formats and types in the item's specs will be dependent on the grade level in which you're looking. So, for example, the one that you are seeing right now is a third-grade copy.

Other item types for the older grades where we have like graphing and

Um...

I can't even think of another one, but graphing and linear equations and all

There will be different item types for those grades. And it will tell you again exactly what type of items.

and the description of how they are being used.

I'm going to go over a couple of common ones that I get a lot of questions about.

Um...

So the first one is our gap match. Our gap match is kind of like a drag to fill in the blank.

When a student clicks on a specific dragger, the boxes on where that dragger may be placed will light up a light blue.

If the box does not light up, then that answer dragger cannot go into that box.

If a student is not comfortable with dragging it.

or they don't have a mouse or whatever the case may be. They can also click on the dragger and then click in the box that they want it to go to, and it will automatically move to that box. If they need to change it for any reason, they have to click on it once it's in the box and then click it back to the row of draggers. So, there's no clear button. They would have to move that out-of-the-box themselves if they wanted to switch answers.

The second most common type that we get questions about are our fraction model types. Our fraction models are more towards the younger grades, and there are Yes, they are. Yes, all of these are on the sample test. Sorry, that question just popped up and caught my attention. Yes, they are on the sample test.

The fraction models come in two different types. There's the square model and then there is the circle.

All of our fraction model types have three buttons on the bottom.

Fewer, more, and reset.

If the box is grayed out, meaning, you know, light and not dark, then that button is not operational for that item or until a student clicks to have more. Once the more dots or lines or sections, let me speak math, sections become cut up, then the buttons will light up and students will be able to make less partitions, make more partitions, or just erase the whole thing and start again. All they have to do to fill them in or to shade them is click the section that they would like shaded.

If they decide that, oh, I clicked too many, they can just unclick one of the color, one of the shaded squares and it will disappear or become unshaded for them.

The third item type that I get most questions about is our equation editor.

There are three different types of equation editors.

Starting with the basic equation editor.

that just has a normal calculator looking thing. It is not a calculator, but the numbers similar to a calculator with a decimal.

A negative sign and the fraction buttons. If a student wants to enter a fraction as an answer choice, they could either click on the mixed number or the fraction, and just as you see in these boxes, they will appear up here.

In the space provided, then the student can click inside the box individually and write the number that they would like to have in their fraction.

Glenn questions get more challenging. The palette will extend.

And in the younger grades, it will include all the operation signs, inequality signs, and parentheses. This would be if a student needed to write an equation.

or something to that effect, where they would need to add in a sign to show what they know about what the problem is asking them to do.

When we get even older in our grade level more stuff gets added to that extended palette. They may see variables.

The multiplication symbol turns to a multiplication dot.

The inequalities of or equal to get added in, as well as exponents, roots, and pi.

Me, a... big, frequent question I get asked a lot is... when students are asked to write an expression and they write it as an equation.

If they're asked for an expression and it is written as an equation, it will be marked wrong because they are not given giving what is being asked of them.

So a hot tip is make sure your students know the difference between what an expression is and what an equation is.

Another question I get asked is about the negative sign and the minus sign.

If there is only one number written in their answer box,

The sign will go before the digit. So, if they had a 5 written in the box and they hit the minus sign and they don't type anything after the minus sign, that minus sign will move to before the five and read it as negative 5.

All of this can again be practiced on the sample test. The younger grades will not see this last example with the extended ballot, as they are not asked any questions about that. That's more upper grades, but they will definitely see the first two. Please allow them to go in and play.

push the buttons, figure out how it all works, so that when they see it on the assessment at the end of the year, they know, oh, this is easy. I know how to do this. If I click this button, this will happen, and they're not shocked when they see it.

For the actual item specs.

They provide us with, if we've not seen these before, they provide us with their content, and then they give a little, or our standard, excuse me, and then they give a little explanation on that standard.

Then...

they give the content limits. Inside the content limits will be written the scope of how that item will be tested.

So if it says must use numbers up to 100, anything that is after 100 is not within the scope, that will not be on their assessment.

If it says don't mention mode.

then mode won't be part of that standard for the assessment purposes.

It also will let you know whether or not context is allowed, required, or not allowed.

So if it is required, chances are that the standard is asking about word problems.

If it is not allowed, it is more of a computational type problem, not a whole lot of words, or maybe just asking the students to identify something.

but it is not like embedded within any type of word problem.

If it is allowed, it can be either a computational question or a word problem type question.

So if you ever want to know when you're teaching the standard, you know, how in-depth they're going to be assessed, that it will help you whether or not it's going to be a wordy problem or not. It also gives examples of demand tasks, where are examples of how students might be asked to present the information that they know about this standard.

Next to that, we have our item types. These have been recently updated since January, and the item types that you see listed are the item types that's associated with that standard. That is more than likely how they're going to see it.

in one of those ways.

If we make a problem that is not one of these ways, we will add it to the item type so that students can be prepared for different ways it will be seen on the assessment. At the very bottom, we have our PLDs. We use our PLDs to decide where our questions fall.

within the scope of the standard.

So for example, here we start off and.

They're given a visual, they must identify, and then they must multiply. Everything else stays the same, and each one will show how they differ.

This same but added measurements without the visual. And then word problems, multi-step problems.

As they continue.

If you just want a quick document for PLDs, if you don't want to look through every standard item specs to get the PLDs, we also have available the PLD documents by themselves.

In these documents, you click on the grade that you like, it's set up, the standards are all on the side, and then the proficiencies as they go up are in the columns next to said standard, and just like on the...

Item specs, it will show.

how they change from one proficiency level to the next, what gets added to make it that higher proficiency level.

Other resources that we have available, we have calculator guidance. We have the Desmo scientific calculator, which is the Desmo calculator that is embedded on the AASA. So again, let your kids practice so that they become familiar. If you are a 7th, 8th grade teacher, they can become familiar with that exact calculator that they will be seeing during their AASA assessments. And then there's also guidance if you are a paper school.

And my favorite thing to talk about are sample tests.

Please, please, please, please, please get your students on sample tests prior to the end of the year AASA summative test assessment. What is our sample test for? It's for students to get familiar with the testing platform.

and the different item types.

It's for students to become familiar with the tools that will be available to them when they take their tests.

It is not used for predicting scores on their AASA assessment.

The Standards are random on our sample test and not all the standards are covered, so it's not a predictor of what they're going to do. It's just to help them play in the system before they actually see it on test day, where they can ask you questions and you can help them figure out how to answer it without breaking any kind of security rule.

It also has text-to-speech, so the kids can get familiar with that, how to speed it up, how to slow it down, how to only play a certain section.

How to listen to the entire problem?

It also familiarizes the, familiarizes, let me get my wording correct, familiarizes them. With the yellow, I haven't answered this question yet. Green, it's been answered. How to save the test if they have to log out to use the restroom during their actual assessment.

so they don't accidentally submit it. For those of us who are third grade teachers or 4th grade teachers, and it may be the first year that the kids have been on the platform, they can practice typing in a password, practice typing in their username. None of that is required to actually get into the test. It's just there in case you want to utilize it so that your students are familiar when they see it on testing day morning. And we always know that, yes, there's technical problems because that's just how life works.

But they will not freak out because they will be familiar with our testing platform. And if you're interested, we would love to have you at our item reviews during the summer where you can participate and give us your input and your feedback on items. There is a QR code here, which you could take a snap or a code shot of. I don't know what it's called. Sorry.

of the code and it will take you to where you can register. All registers, once filled out, they get put into a bank and when it comes time, that bank gets put together and people get invited to come spend a few days with us and get fed and Give input on how we can make this test better.

and a better experience for the students.

Any questions?

I will be on for the rest of the time. So, if there's any questions that come up, please just go ahead and put them in the chat. I am going to go ahead and pass this over to

Marisa.

And give us just a few seconds to turn things over. Thank you.



Tualla, Marisa 26:14

All right, thanks, Melanie. That was a lot of good information. I definitely learned a lot myself. Oops, I picked the wrong screen. Let me try that again.

Here we go.

We're going to switch gears a little bit, and now we're going to talk about the standard side of the assessment, specifically the Arizona Math Standards. But to get us a little warmed up, here we are here to talk about math. So, I do have a question for all of you that I'd like you to reply in the chat. So, take a look on here. There are four numbers, and my question to you is which one doesn't belong?

And I want you to think about why do you think that number doesn't belong? When you have an answer, just type it in the chat and we'll see what you guys think of which one doesn't belong.

All right, 9, it's the only single digit number.

16 because it's the only even number. A lot of people are putting 43.

Because it's not a square number.

Ooh, another one for 9. It's the only number where the digits don't add up to seven.

This one's pretty unique because like $1 + 6$ is 7, $2 + 5$ is 7, $4 + 3$ is 7 and 43 is the only one that's not a square number. I'm just, this is the one that usually a lot of people don't really come up with 25. So, I want to see if anyone can think of a reason why 25 might not belong.

I had one teacher tell me once that it's the only number where there's not a, like a closed number. So, like 9 is closed, like there's a closed circle. Six does, two and four do, but 25 does not. Yep, and it's the only one who has a multiple of five. So, I just like to bring this up. This is called an instructional routine. It's a great way to start classes to get kids warmed up, talking about math, thinking about math, and really going beyond that DOK level one thinking. And so, these are really great routines in your classroom to get kids started thinking about and talking about math. And then we always want to talk about our standards for mathematical practices. So, we have our content standards, and then we also have our standards for mathematical practices. I like to equate these similar to the science and engineering practices, But these are how we want students to be engaging in math class, and these are part of our K-12 standards and so, when you look at these eight practices, and you think

about the question you just answered, which of these practices did you engage in with that question? And go ahead and type the numbers one through 8 in the chat of which practice did you engage in just now.

One is a very common one, right? When you're thinking about math, that is what one is. You're making sense of problems and persevering in solving them. And that's definitely what you want kids to be able to do when they're taking the assessment. You have reasoning abstractly and quantitatively. You might have used tools while you were doing this, looking for the structure of the numbers and place value and digits.

Yep, and then I would also say three, you guys were giving me like arguments for your reasoning and people were, you know, we were looking at the reasoning and making sure it makes sense. And so, we always bring these up to our teachers because sometimes we kind of, they kind of get lost sometimes when we're looking at standards. But if our students can do all of these eight practices, then they are definitely going to be prepared for any assessment that comes in front of them. And so, these are some standards we really want to make sure we're seeing in the classroom.

So, this is your ADE Math Standards team. My name is Marisa Tualla. I'm A K-12 Math specialist with the Arizona Department of Ed. Eboney McKinney is my boss. She is the director of math and at tech standards, so she gets to cover both. And then Laurel Cherry is a fellow K-12 Math specialist with me.

And so I started my teaching career as 6th grade elementary, then became middle school math and science, and a little bit of high school, but middle school math is where I spent most of my career before I became a K-8 math specialist for the Washington Elementary School District, and then joined the team here at ADE. So if you have any questions when it comes to math standards, K-12,

Feel free to reach out anytime and we promise we will answer all of those emails.

Every time we talk to any school or district, we want to share our working agreements as a state. And so, one thing that we always tell everyone is that everyone is a math person. All teachers and students can participate in math at high levels. You guys are all math people. You're here. You do math every day. You are math people. Sometimes we say things that challenge your thinking and that is okay. We're here to ask questions, take risks, try new ideas. Our goal is to create mathematically proficient students, and I do, we do, you do cannot achieve this. So, when we're thinking about AASA and the type of questions and problems kids are

going to get, when you only teach as I do, we do, you do, which was created to teach.

teach reading, you can't necessarily prepare kids for every single problem they're going to see. And so, we really want to focus on getting kids to do the problem solving, kids do the reasoning instead of the teacher. We're all learners in the space, like to say, we're all learning every day. And then the idea of being fast at math is not being smart at math. We're really not looking at speed when it comes to solving math problems and we want to take that idea away and focus more on the bigger ideas of reasoning, problem solving, inquiry to really help kids understand and support math.

So when we're thinking about the state assessment, we have two big ideas that we want to get across. Teachers should, number one, understand all parts of all their grade level standards. As you see from the item specifications, all domains are going to be tested. And so, we need to make sure that teachers are still teaching all of the grade level math standards. We also want to focus on your grade level, because that's also what they're going to be tested on. So, if I'm teaching 4th grade, I shouldn't be going back and teaching second grade again. You really want to focus on your grade level standards, and if kids need support, you give them to the moment, or you do it in small group intervention.

But every child should have access to grade level standards. The second thing we want to talk about is building problem solvers, not test takers. There are some good tips, and Melanie talks about some good ways to get kids interacting on the program, which is really, really helpful. But when we're thinking about answering questions, we don't want to just give them test taking tricks. We want to help them to build.

build to become better problem solvers. So, it doesn't matter whatever problem they come up with, they have tools that they can use to figure it out. And so, when we're thinking about math standards, here's a third grade standard. Now when you read this, a lot of people kind of focus on that first part of the standard, but we want to look at the standard as a whole.

And so things that teachers should be asking themselves when they're looking at the standards that they're teaching is what vocabulary, facts, or concepts must students know?

And then they should also be thinking about what representation sketch diagram model should a student be able to demonstrate that shows me they understand this

standard. So, it's beyond just answering a question correctly. We're really looking at the full picture here. And so oftentimes when we look at a standard, you might not look at the whole thing. And so, I highlighted the second half of the standard, which is the majority of the standard that sometimes can get overlooked. And so, when breaking down everything that the standard is asking students to be able to do, we're talking about algorithms based on place value. So, algorithm, just means a set of steps or a procedure that kids can follow to get the answer. There is no one set of steps kids have to use. There is no one set algorithm students have to use. So, in this case, this is expanded form based on place value. This is an algorithm students can use to solve.

When you're thinking about properties of addition, right? You have your associated property, your commutative property, and so kids will start to see strategies and patterns. So, here's a strategy students can use. They can compensate, take two away from the second add-in to make that first one 100, because 100 is an easier number to add.

add. It's a nice and friendly number. And now they can probably solve this more quickly than maybe the stack and add traditional algorithm. So, we want to make sure kids are looking at other strategies. And this is something they learn based on like, you know, first grade when they're learning how to make a 10. It's a similar idea to making 100. And then that relationship between addition and subtraction.

So when kids are subtracting, they don't always have to use a subtracting strategy. They can actually use an addition strategy too, or a count up strategy with somebody they learn in kindergarten. And so, we want to make sure that we're looking at the whole standard that teachers are supporting students in all of these ways when it comes to that.

this example with adding and subtracting, because it's not going to say they have to do a specific strategy or specific algorithm. Kids get to choose. So, we need to make sure they give them options that make sense to them.

The other piece is that building problem solvers versus test takers. And so SMP1, which we kind of saw already, which is makes sense of problems and persevere in solving them. We need students to be able to do this if they're going to be successful on the state test. And so, what does it look like to build a problem solver versus a test taker? I'm going to show you a quick video.

of students that were asked a question and how they answered it and why they answered it that way. So.

One thing that we want to do while you're watching this is thinking about how can we avoid these problem solving hazards or test taking strategies that sometimes take away what students are able to think and do and kind of do the opposite of what we're hoping them to be able to do.

Let me know if you cannot hear this.

There are 125 sheep and five dogs in a flock. How old is the shepherd?

What?

There are 125 sheep.

and five dogs in the flock.

How old is a shepherd?

I don't know how to solve this. Why is that? Because it doesn't talk about anything about the shepherd.

Sorry, I saw that there's no sound in the chat.

About anything.

Yeah, OK. Thank you. Thank you very much.

There are 125 sheep and five dogs in a flock. How old is the shepherd?

120 years old. How do you know it's 120? Can you please write down here?

Now, how do you know that the shepherd is 120 years old? There was 125 minus the five dogs and a flock.

Okay, thank you very much.

Thank you. Can you tell me how did you know to divide?

Because it doesn't say the difference, or it doesn't say the sum.

Or the product or something. I see. Okay, thank you very much.

All right, I like to show that video because these are 8th graders and the majority of them did not get the answer correct because they've had like 7, 8 years of being told how to solve a problem and it didn't work anymore. And so, if you heard the last student, they were talking about looking just for specific keywords to help them solve the problem.

And this is something that is very common. I used to do this as well. But what happens is when you only teach kids keywords, it takes away all the sense making for students. And that's one of the biggest hazards when we're trying to prep our students for tests. Shortcuts, keywords, mnemonics, such tricks and instructional approaches are well intended, but set the stage for a setback, loss of retention and frustration. Problem solving hazards leads to less success when new problem types in classes of numbers are introduced or when numbers of steps increase. And so,

something might work for a first-grade problem, but it will stop working later on. And now they're in 6th grade and they don't have any other ways to solve a problem because they're a lot more complex than they used to be. And so, one of the hazards we do want to step away from is teaching just keywords.

Another hazard you want to stay away from is called cubes. This idea is similar to keywords. In this case, you're circling numbers, you're underlining a question and you're boxing clue words, and you're just looking at that information to help you solve. And unfortunately, this sounds nice, like, oh, kids just follow the steps, and they'll be able to solve every problem. But it really takes away understanding as well of the context of the situation. They're not making sense of what's happening here and it doesn't support reasoning or thinking at all. And so, this falls into the same trap as kind of keywords. And I would call out myself. I had a poster like this in my room. I thought it was going to be helpful.

But that's also what's harder with that English language is that many words have multiple meanings. So that even though we might tell kids one word is always going to mean something, that's not always true because it depends on the situation, the context. And when we think about supporting our multilingual learners, we're going to make sure that we aren't teaching them that every word only has one meaning because we know that actually sometimes left has multiple meanings.

And so keyword and cubes are things that we kind of want to move away from when it comes to preparing kids for solving problems.

So these are just some examples of where, you know, things could come into place. So, when you look at this problem A, you might have, if all the kids are thinking about cubes, they're going to start circling every single number. So, they're going to circle three, even though it says grade three, right? It's not actually part of the problem, like solving the problem, but there's a number there, so I'm going to circle it.

And then you see the word left in the question. So usually we turn, we learn the word left means subtract. But if you actually read this whole problem, that's not what's actually going on. You would actually have to add the amount of jackets that are left on the playground. And here's another kind of thing to think about. Like there's only one number in this problem, so kids might not know what to do next. It's because one of the numbers is in word form. And then you've seen the question says times. Well, we times, we think multiply. But again, if you actually read this whole problem, you're not going to multiply, actually. And so, this is where we see these issues where

we only teach cubes or we only teach keywords. We're not actually helping kids solve problems or make sense of problems and persevere in solving them. And then this last one, like there's 13, but there's no keyword. So, kids might be like, I can't solve this, right? And so that's what we're saying. If we're actually preparing kids for the assessment, we want to make sure we're staying away from these hazards that will not help them in the long run.

And so here are some of our final tips that are going to help our kids get there. One tool that I like to bring up a lot is the multiplication chart or the multiplication table. This is a really, really good tool for intermediate and upper grades math. You can do multiplication and division facts. You can find factors and multiples.

You can find equivalent fractions. It helps to finding ratios and proportions. And it's a tool that I use all the time in my classroom for my kids who weren't quick with those facts yet by middle school. They were able to use this chart while I was in class. The biggest question I get is, but they can't use this during the test. So, some things that we do are we started with filling out multiplication charts throughout the school year. We'd start with one that was partially filled out, then one that was less filled out, then one that was empty, to the point where I gave them a blank piece of paper and I said, make a multiplication chart. Because if it comes from the students, then they can use it, right? If they like this tool, they want to use this tool,

They can just create themselves, use it from their own memory, find all the patterns, two fives, 10s, and go from there. And then, yeah, they can use it the entire time that they want. It's up to the students, right? So, we don't want to take away tools from them that we know it's going to help them be successful.

And so just kind of like the final ideas is take down those posters that say keywords and cubes. Let's move on from that. And instead, let's go to asking our kids questions like, what do you notice? What do you know? What are you trying to find out? Those 2 questions are going to be more helpful for kids when they're solving problems.

than cubes and keywords is going to be, because you can ask those questions for any problem they come across. Another idea is when you're doing word problems with your students, to practice that is to remove the numbers, have them make sense of the situation and the problem 1st and what they're supposed to do in order to solve, then give them the numbers and they can kind of go for it. But we have to kind of teach.

them to think that through 1st and build that habit first. And building thinking

classrooms. We've never heard of this book. It's that orange Bunn on the corner. And it's a great way, practical strategies for teachers to get kids to think and problem solve in the classroom. Because what we want to see in math, we want to see kids thinking. And unfortunately, we see a lot of kids mimicking, but we need them to be able to take all those problems themselves and using the tools that they have and their own knowledge and funded knowledge to attack a problem that you've never seen before. And so, building thin classrooms has a lot of great strategies for teachers on how to do that.

So, all that information, I just want to say thank you for listening to all of that from the standards point of view. We are here all year, obviously, so you can reach out anytime you have questions about standards and the teaching and learning at K-12. We will be here to support you in any way that we can. And so, I'm good. I finished with enough time to see if there's any questions.

Not seeing anything in the chat. Oh.

We're sending Jason for PD offerings for the year. We have been doing PD for instructional coaches this year to help support schools and so we have a couple sessions next in the spring semester coming up, empowering coaching part 2. And then other than that, we're doing school site requests.

So we have a few districts that we've been going out to based on requests to give PDs. And we always have the asynchronous ones. We have some on the math teaching practices. There are 9 different courses for that that teachers can go through as well.



Hill, Melanie 48:16

I would just like to thank everybody again for coming to our presentation today. If you have any questions, please continue to drop them in the chat. We will be on until 2 o'clock, so, if you have any questions, please let us know. You can also e-mail either the AASA@azed.gov or testing@azed.gov, if I got that wrong, please someone correct me, for questions about Standards, you can also e-mail them as well. Thank you again.

Since I don't see any new questions, we will be on for just a few more minutes. If you don't have any questions, feel free to leave and we will stay on for a few more minutes before we end. Thank you.

All right, so no new messages. We are going to go ahead and close out for today. Thanks again for anybody that is still on. Thank you so much for joining us.