Meaningful Analysis of Early Head Start (EHS) School Readiness Data

Karen Hennelly: My name is Karen Hennelly, and I'm out of the Region V office of Head Start. I am the supervisory program specialist in the office and the infant/toddler specialist in the regional office, so I've had the pleasure of attending "Birth to Three" for the last few years, both virtually and in person, and I'm excited to be here today to talk to you all about the meaningful analysis of Early Head Start school-readiness data.

So, how many of you have lots of questions about school-readiness data? It's a little bit tougher with those infants and toddlers, right? It's not quite the same as with our 3- to 5-year-olds where we can kind of take the data and aggregate it pretty easily and we're good to go. With our infants and toddlers, because they're developing at such different levels, we have to look at the data in a little bit of a different way. So, today, we're going to -- we're going to look first at school-readiness goals. And I always get a couple moans when I say this, because we're so overwriting those school-readiness goals, but the important thing about the school-readiness goals is that that really guides your data.

So, if your goal isn't strong, then your data isn't going to help to support that goal. So, unless you have those strong, detailed goals, we're not going to be able to aggregate data to inform those goals. The next thing we're gonna look at is the use of some new skills and strategies to aggregate data, and that data will then help you with your goal-setting and planning for the future, for the next program year, for future program years, based off of what you've learned from that data. And then, finally, we're going to develop -- we're going to talk about developing a data-aggregation plan that uses multiple sources of data.

So, we're not just going to look at that school-readiness data that you've been capturing. We're going to talk about all the different data source and the different types of data that can be used in aggregating for your Early Head Start school-readiness goals. Can I ask everybody real quickly, before we get started, to make sure that your phones are on mute. Since we're welcoming a number of individuals through our live-streaming process, I just want to make sure that we don't have any interference with cellphone data.

I know that the reception down here isn't amazing anyways, but if you could make sure that they're on silent, that would be wonderful. Okay, so, let's start by taking a little bit of a review around school-readiness goals. So, 1307 really re-established for us the need to design and implement Early Head Start school-readiness goals. And some of the key components of the development of those goals is that they align with different parts of systems that you have within your program. So, for instance, you need to make sure that your goals are appropriately reflecting the ages of the children that you're working with.

We're also making sure that they're aligned with the five essential domains, that they're aligned with your state early-learning standards, and that they're aligned with the expectations of schools. And this one's a little bit tougher for infants and toddlers, aligning with the expectations of schools. So, typically, you want to look at that -- if you're a single-purpose Early Head Start program, you likely want to look at the alignment as aligning with maybe the Head Start program in the area, or, if you don't have a Head Start program in the area, then talking with the schools and thinking about what the schools would like children to be at a certain point by the time they enter kindergarten, where would that look -- what would that look like for a 3-year-old?

So, we're not expecting our 3-year-olds to be at the level of a 5-year-old but looking at what steps would help them to get to that next level. And then, of course, if you're an Early Head Start/Head Start program, you can either have broad goals that encompass the entire program, Birth to 5, or you can have goals that align for Early Head Start to Head Start. And then, of course, I know this is a review for everybody, but our five essential domains are language and literacy, cognition and general knowledge, approaches towards learning, physical well-being and motor development, and social and emotional development. And these are gonna look a lot different for our infants and toddlers than they're going to look for our preschoolers, so it's important to think about how these goals build as children age and develop.

How many of you have seen this before? Yay! So, this is our Early Head Start pyramid, and it -- A few years ago, it was amended to really take into account the school-readiness component that has really become at the forefront of Early Head Start and Head Start. And when looking at this, this is a really important tool to use when thinking about your goals, because in order to reach a goal, there's different systems and services that have to come into play.

There's the management system. So, a strong foundation for our program is going to be your management systems, and then you build upon that to develop your program systems, and then your outcomes for the programs, which lead to your ongoing goals. So, it's thinking about how your program, in general, really supports the goals that you're developing. So, when we think about developing effective school readiness goals, we're thinking about whether or not the goal shows a few different components.

So, we all know that infants and toddlers grow and develop really quickly, so it's "how do we capture that through our goals?" And "how do we capture that relationship component?" Which is so critical for Early Head Start children. So, how do we develop those goals to still measure the impact on a child but yet knowing that the relationship that a child is building with its caretakers, with its parents, with whoever comes into -- whoever comes into play with that infant or toddler, really emphasizes the development of that goal. And then we also need to think about that critical impact of brain development.

So, what does this really mean? So, this means -- and this is kind of a contradictory statement -- the goals should be broad but not too broad. So, what does that mean? So, if I was to write a school-readiness goal, would I want the goal to encompass an entire domain? Yes? No? We want it to be part of a domain, but we want it to be broad enough under that domain that it's something we can measure but not measurement of a whole domain. So, to make a school-readiness goal "all children will meet or exceed our expectations for cognitive development," that would be way too broad. That would be almost impossible to measure, especially when you think about all the different components that come into measuring that, 'cause it's not just that school-readiness data that you're collecting.

There's different developmental assessments that you're doing, the health screenings that you're doing -- all of the different components that come into it. So, the reason a goal needs to be broad, but not too broad, is because we need to be able to ensure that we can measure that goal. And to the next point, we need to make sure that that goal is changeable. So, if your goal is "all children will meet or exceed expectations in the social-emotional domain," can you ever change that? No, because that goal -- You've already hit the highest level of that goal.

So, what you can change is that "all children will develop a secure attachment with their caretaker." And then once you've found that your program has really solidly hit that goal over and over, then you would change it to something else in that same domain.

So, it's thinking about how you can make something broad enough but changeable. And then, of course, the goals need to be representative of developmental needs of children. So, when we talk about this, we're talking about the fact that you can develop an agency-wide zero-to-five goal, but when you measure that goal and when you look at how you're measuring that goal, you need to ensure that you're measuring it based on the age of the child.

So, for instance, if your goal is -- is really hitting on a function that would be more specific to a 4- or a 5-year-old, what are the components that help to build an infant and toddler up to that point? So, we're not expecting our infants and toddlers to be able to have that fine motor skill to be able to write, but we may expect them to be able to show us that they're moving towards that skill. So, whether it's that they're starting to do the pincher, that they're even able to recognize their hands and their feet, it's those small gross -- those small fine motor skills that are really going to lead to that fine motor skill of being able to write. And they, of course, should be measurable for all age groupings. That kind of goes in part. Okay.

So, take a look at these pictures. So, I always think that this is a great example to use with parents, and the reason I think this is a great example is because sometimes when you show parents your goals or when you talk to them about a school-readiness goal, they're going to think about what you're expecting their child to be able to do at sometimes a different age than that child really is right now. So, it's really important to help frame for parents what your expectations are for children at different age levels. So, if you take a look at this picture, you'll see some infants and toddlers developing towards a special goal. And there's a couple of goals that you could probably come out of -- that you could come up with out of these pictures.

But you'll see that we've got our infant up in the left-hand corner who's kind of starting to push himself up, you know, getting a little balance there. We've got our little guy below him who's on all fours, starting to crawl, maybe not quite crawling yet. It looks like Mom's got the camera out, so, maybe we're capturing that first crawl. Then we've got our little one in the middle who's standing but with support, so she's up, but she's still probably not able to walk on her own yet. And then we've got our toddler who's starting to walk a little bit. And then we've got our older toddler there who's obviously starting to pick up hopping and jumping and some of those more developed gross motor skills.

So, if you were to show this picture to your staff or to your parents, what goal would you tell them that these children are all progressing towards, or what would be something that you could qualify from the information that you have in front of you from these pictures? What about the domain that you think that these children are working towards?

Physical development? Great. Okay. Can we drill that down, then? So, then what's maybe the specific part of the physical-development domain that these children are progressing towards? Gross motor. Great. So, this would be a great example to show parents and staff of this is the development -- a continuum of children developing their gross motor skills. So, we're not expecting our infants to be able to walk and to jump and to play, but what's important is that we've got our infant in the left-hand corner who's starting to lift her -- him or herself up. And that's the start of our gross-motor development. And you could do this for almost all of the domains. You could find lots of different pictures that could help you really talk about the progression in a visual form, because it really helped individuals who don't have the early-childhood background to see what you're talking about in a visual form when you're talking about a progression. So, you all -- You're right on par.

So, the domain that we would see from these pictures is the physical well-being and motor development. And a sample goal -- and this is a goal that's right off of the early head start exemplar goals on the ECLKC -- is children will develop control of large muscles for movement, navigation, and balance. Now, is this a goal that you could use for Birth to 5? Yeah. It is. But it's gonna look very, very different for our 6-month-old than it's going to look for our 4 1/2-year-old. And we need to make that clear when we're talking about how we're measuring it for different children. And, of course, for young infants, this would be the act of kind of pushing up, balancing, sitting, maybe starting to crawl. With our older infants, we're starting to walk, toddling, a little bit of climbing, usually with some sort of support.

And then for our toddlers, we're talking about really having some more coordination of their body movements, being able to run, or toddle at a faster speed. So, if we put this all together and we think back to the regulation around early head start school-readiness goals and we think about how we can show, as a program, that we're meeting every piece of that regulation, well, the first part of that regulation is that we have our domain, and our domain is the physical well-being and motor-development domain.

And then each program has developed very specific goals. And you can have one goal for each domain -- you can have as many goals for each domain as you would like. However, you have to have at least one, and I caution you about having too many, because that oftentimes makes it more difficult for you, as a program, to go through the whole analysis process, and the point of the school-readiness goals, in the eyes of Head Start, is that we're not creating a goal for everything we want a child to be able to do.

We're creating goals for our program based on what we've determined to be the need. So, I think that in -- I think that in the world of education and education learning, this can sometimes be a little confusing, because we're not expecting as -- as oftentimes the word "goal" is expected to mean that you have a goal for everything a child should be doing. So, we're still expecting that you're measuring every single component through your assessment tools, that you're still meeting your state early-learning standards, that you're still going through that process. But when we're thinking about Early Head Start school-readiness goals, we're asking you as a program to drill down specific goals, similar to the process you would use to develop agency goals, that are -- that are going to allow you as a program to continue to develop and strengthen your program by focusing in on specific elements that you've noticed are areas that may be troublesome within your program.

So, maybe you're noticing that your infants and toddlers really don't seem to be gaining those fine motor skills that you typically see in -- across the program. So, what would you do as a program? You develop a goal around that fine-motor issue, and then you would monitor that goal throughout the year, using your different sources of data. So, it's looking at it from that frame point that really, I think, helps everyone to understand the difference between what a school-readiness goal is for Head Start versus what educational goals are, in general.

Does anybody have any questions about that? Okay. Yeah. So, we're gonna -- if you could wait for the mike, just so that everybody -- everybody out in cyberworld can hear you.

Female speaker: Where's the question? Okay. Great.

Female speaker: So, even if the -- even though you need to have -- you can choose what school-readiness goals you have, you still should have one in each of the domains?

Hennelly: Correct. So, the regulation requires at least one goal in each of the five domains. Exactly. Yeah. Absolutely. Great clarification. So, if you look at this page here in front of you, you can see that we've got our school-readiness goal, and then we've -- we've dug a little bit deeper, and we've identified certain benchmarks that we would expect for the children, and these benchmarks are straight -- could be straight out of your assessment tool or could be out of your state early-learning standards, however you've developed your school-readiness plan as a program.

But these benchmarks are really what are going to indicate to you as a program how you're measuring this goal. Because without actual specific measurement benchmarks, it's very difficult to then draw conclusions about a goal, 'cause we need to be able to link data to something. And then, of course, what always comes into play is your -- your teachers' anecdotal notes, your indicators, your evidence, whatever is in your assessment tool that's helping you to build up to this school-readiness goal. And then this is just another slide that kind of shows us how everything aligns.

So, if you're trying to show for your stakeholders, for your program, in general, how you're hitting each part of the school-readiness regulation, it's oftentimes nice to break it down and look at it from all the different components. And I always think it's a good idea to put what you're using as your supporting documentation so that whenever you're sharing it with anyone, you can go back to that and say, "the reason that we've developed this part of our school-readiness plan is based on this information that we have, is based on the fact that we have to align it with our state early-learning standards or the fact that we have documentation that's showing us that our children really -- we need to focus more on a specific content area for our children." Yes?

Male speaker: Starting up in that upper-left box there, I think because, you know, Early Head Start, like all program -- Head Start programs have to serve children with disabilities, I think, you know, in inclusiveness, it may not always be the chronological age. I think we're also looking at developmental age of children, so that's a piece to look at when you see the word "age" there.

Hennelly: Absolutely. And I think that's a very good point. So, it's up to you as a program to really define how you'll be measuring for all of your children, and I think that's a very nice point that sometimes when we quantify something -- so when we say zero to 8 months or 6 to 18 months or something of that nature – then we are putting children who aren't necessarily developmentally at that age in a box that we don't want to put them into. So, it's thinking about how you as a program can explain to your -- to your staff, to your parents, to your stakeholders what you mean by the data and how you're -- and how you're developing it. And we have a question from the cyberworld.

Female speaker: From the field. "Using this example, can you add a few comments on how to set a measurable outcome? For example, 95 percent of 12-month-olds will do such and such. How do we go about determining those targets?" Hennelly: So, we're gonna talk a little bit more about data and how to measure these goals with those sort of outcomes and impacts. Oftentimes, and this is my recommendation --

I want to preface it with this. This is always an agency goal, or an agency decision. But oftentimes, when you set a goal for school-readiness that expects you to hit a certain benchmark, you're going to find that, for infant and toddlers, your data is not going to be -- is not going to help support you in meeting that goal. And what I mean by that is that, if you're saying that 95 percent of your children will meet -- let's go back to –

So, if 95 percent of your children are meeting your gross-motor goal, you're going to find that you're -- that is very difficult to show through the information that you're collecting for infants and toddlers. So, I think the better way to write infant and toddler goals is to eliminate that sort of quantitative marker for the impact and leave it as a broader statement, because you're going to find that when you start to explain to your stakeholders and to your staff and to your parents where children are, that you're never going to have 100 percent of your children or 95 percent of your children meeting a specific goal if your goal is written well.

Now, if your goal is too broad, you may find that you can sometimes manipulate the data, but I think, in general, it's a better idea when thinking about infants and toddlers to not quantify those impacts for children outright but to quantify it in your explanation of what you as a program have successfully completed over the course of the year. And we can talk more about that in a few minutes or so when we get to the impacts. Hopefully, that helps to kind of outline it for those with questions out in the field. Okay. So, let's do a quick little quiz to get everybody kind of moving, and up and I know that, you know, we're in these dark rooms with no -- no natural light, so, hopefully, this will get everybody a little energized. Okay. So this is called "name the domain."

Okay. So, this is a school-readiness goal. So, a program has developed this goal, and it's "children will develop and engage in positive relationships and interactions with adults."

All: Social-emotional.

Hennelly: Social-emotional? Round of applause. You're all pros. Okay. Next domain. This one always throws people. "Children will use all of their sense to investigate -- should be senses -- to investigate their environment to discover what objects and people do, how things work and how they can make things happen."

All: Cognitive.

Hennelly: Cognitive? Anybody else? Approaches to learning? Okay. I think you can make an argument for both. So, I put it under cognition and general knowledge, but I think you can make an argument for approaches to learning if you have the right -- if you're using the right indicators to show how you're meeting that goal. So, sometimes it comes down to what indicators you're using. Okay. So, let's talk about Early Head Start data. Okay.

So, we're gonna start with the regulations, 'cause we always have to go back to the regulations. So, in purple, I've highlighted the key terms that we're going to talk about right now. So, 1307, from the head start performance standards, requires that all programs aggregate and analyze child-level assessment data at least three times per year. Everybody's got that down? Yeah? How many of you are doing it four, for your Early Head Start? Great. Excellent. Sometimes -- that's often the case with our Early Head Start programs is that they like to do it four times a year 'cause it gives you kind of -- with the full-year program, it gives you those quarterly -- those quarterly periods. Okay. And that we use the data in combination with other program data. Okay. The part that's underlined here, I really want to emphasize. The regulation says that we're using this data to determine your progress towards meeting the goals. Progress.

So, does it say that we should have 100 percent of children meeting a specific goal? No. And I really want to emphasize that for infants and toddlers, because you're not going to see that sort of benchmark being hit. So, it's really important to think about that key term from the regulation. We're using this data to determine your progress -- your program's progress -- towards meetings its goals. That's why it's important to have strong goals; because in order to determine your progress, you have to have a measurable goal that you can actually determine the progress on. Okay. And then this part of the regulation I'm sure you're all familiar with. It talks about the different types of assessment and the five domains that we're ensuring that all of our goals are written under. Okay.

So, what does it mean to analyze data? If I was to tell you, "I've got so much to do today. I'm spending all day analyzing this data," what am I going to do all day? Say that louder?

Female speaker: Hypothesize.

Hennelly: Hypothesize. Great. What do I need in order to analyze data? Data, right? Do we have a problem with having data in Early Head Start?

Female speaker: Yes.

Hennelly: Really? We'll talk. Maybe, you have -- maybe we have a problem with finding the right data.

Female speaker: Or a good tool.

Hennelly: A good tool. There we go -- a good assessment tool to get data from. So, when we talk about analyzing data, we're talking about that progress of taking data and making meaning of the data. So, it's not just taking that data and generating a bar graph that nine out of 10 people that you show that bar graph to are going to not understand what it means. And I can tell you from years of working in education that I have seen some really bad bar graphs that basically mean nothing, unless you're explaining what that data means. So, you have to actually take the data and make meaning from the data.

So, it's not so much -- it's not just the process of quantifying that data. It's the process of analyzing that data, too, to make meaning from it. So, there's two types of data that programs are collecting. You have your qualitative data and your quantitative data. So, your qualitative data is going to be any data that's not expressed with numbers. So, this is your anecdotal notes, your observations that you're doing, things of that nature that are not expressed with numbers. Then, you have your quantitative data, and oftentimes, qualitative data is turned into quantitative data using some of the assessment systems that you're using.

So, they're taking certain data and they're turning it into numbers. So, they're asking your teachers to draw a conclusion from an observation that they've made and then determine where, numerically, a child may fall, or sometimes they use it -- they alphabetize it, or whatever, but a way in which you're actually able to eventually express things in numbers. So, remember this point, because I think, oftentimes, when we think about data, we go first to the number data, and that's not always, with infants and toddlers, the best data to start with. It can be. It's a good -- It can be a very good starting point for digging deeper into data, but it's not the only data we want to be using with infants and toddlers, or with even preschoolers.

We don't want to -- we don't want to only look at certain sources of data because they're giving us numbers and they're quantifying things. We want to think about it also in the qualitative approach and what we've learned and what we've seen in those classrooms or what we've seen on those home visits or what mom has reported that the child is doing, you know, outside of home visits.

So, in Head Start, we have a lot of data. So, you have anecdotal notes, you have your ongoing assessments, you have your attendance records, your health records, your family information -- it goes on and on and on. We are not at a loss for data, but what we oftentimes are at a loss for is how to aggregate that data and how to really set up the process to analyze that data. So, this is my suggestion as to how to think about analyzing data. So, there is no right way or wrong way to analyze data if you think through it in a logical progression, but this is what I would recommend to a program and what I think is a good way for you to start thinking about what works for you as a program. So, how many of you actually have a school-readiness team? Excellent.

For those of you who don't, think about it and consider whether or not you have -- you think it would be beneficial for you to actually put together a core group of team. How many of you who have a school-readiness team include direct staffs, like teachers, teaching assistants, home visitors... Okay.

So, the hands kind of dwindled in the room a little bit when -- and I think that there's a really important reason to always include some direct staff in your school-readiness team, and the reason is, they're the ones who are out in the field or in the classrooms using those tools. So, they're going to be the person who's going to tell you, when you're trying to look at this data and you're trying to figure out, "Well, how are these kids not progressing in this area? I mean, we do this stuff every day." They're the ones who are going to explain to you or help you to understand that maybe it's the understanding by the teaching staff of the tool that's really causing some of the issues. So, they're gonna give that you insight from the classroom, which is so important, because it's important to know what's going on, and it's important to think about things with infants and toddlers not just in the data that's on the table in front of you when you have everything spread out and you're trying to make meaning of everything. It's thinking about what's happening with each of those children and where that child started from.

That's a really key point, because oftentimes, and this goes back to the gentleman in the middle's point about children with disabilities, we may have children who, developmentally, are at a very different level than they are age-wise, and we have to think about that when we're thinking about the way that we're actually quantifying information about that child.

So, the first step, form that team. So, think about who you'd want to be on that team. You're going to want your education coordinator, you will probably want some front-line staff or direct staff, you're going to want some of your health coordinator -- lots of folks who have an impact on -- who may understand the data or may bring additional data to the table. Then you want to talk -- then you want to use your school-readiness plan. So, we talked about this a little bit earlier. So, if you haven't developed a school-readiness plan, that's your first step as a team.

You want to develop that school-readiness plan and explain how you're going to do the process of analyzing and aggregating and collecting data. If you have a plan, you want to make sure you use it, or update it, 'cause oftentimes, we write these plans, and then we find out, "we need to tweak this a little bit. It doesn't quite work with our schedules. It doesn't work with the data that we're collecting," things of that nature.

So, it's revisiting that plan, as well. Then, you want to identify your data sources. So, why is this important? Well, there's lots of different data sources out there, right? How many of you look only at primary data sources? So, these are data sources collected only by you as the program? Okay. That's a great stepping point.

So, those primary data sources are usually very valid sources because you know that the data is right 'cause you've collected it. There's another source of data that we sometimes forget about and that's your secondary data sources. So, secondary data is data that's collected from outside of the program. So, it's national data; it's local data collected by the WIC program; it's data collected by the school system; it's data collected by different sorts of organizations outside of your program.

So, it's data we can use because it can help explain things for us, but it's not primary data; so, it's more difficult to actually aggregate secondary data, but it's usable data when you're thinking about explaining what could be happening in your community. So, for instance, if you're finding that, across the board, gross motor is just down for children -- it's just not -- in the years past, you've always seen that children have a really upward trajectory of this type of gross-motor development, but then, all of a sudden, in the last two years; it's just gone down.

Well, that's when you might actually want to go out to the community and find out what's going on. Are there -- you know, have playgrounds been taken down?

Is there increased violence in the area so families aren't leaving their houses as much? Has the weather been really bad? I mean, how many of us dealt with that this year? I'm from the Midwest, so we had a really crazy winter. And a lot of our programs, because of that, if they didn't have really great indoor space for children, didn't have a lot of gross motor opportunities for children outside of kind of just the classroom area. Or you're trying to balance everybody in the gym or the gross-motor area, but you're not used to balancing every classroom in that area. So, it's thinking about what could have an impact on why you're not seeing certain trends occur that you've seen in the past, and that's where that outside data can come in. Any questions so far? Over in the corner.

Female speaker: Hi. Good morning.

Hennelly: Good morning.

Female speaker: I have a question. Is there some information to support the importance of accurate data? In our school-readiness team, we had a meeting, and this was the Head Start program part of our program. However, some teachers, when we were looking at the data, I was saying, "no, that child is not there social-emotionally when I've done observations," and teachers were honest and were like -- well, they felt concerned about being completely honest and expressing where the child was at to the parents.

Hennelly: That's a very good point, and actually, the last part of your point there was pretty impactful -- is the fear of telling parents where their child actually is, developmentally. The first part of your question, around ensuring the accuracy – our data is only as accurate as the data -- I mean, our analysis is only as accurate as the data that we're collecting. So, it's your job as a program to really work to make sure that that data is accurate. So, it's ensuring that you work into your school-readiness plan those checkpoints throughout the year, where your education staff or your mentors, coaches, teachers, whoever is kind of overseeing the input of that data into your systems or the recording of the data, if you're using any of the handwritten tools -- whoever's in charge of that is making sure that that data is accurate. And it's really looking for trends in the data.

And we're gonna look at a couple of examples in a few minutes that could really, you know -- it's really a simple process of kind of going through and just looking for trends in the data and seeing if one teacher seems to always be scoring a child at a higher level. Could it mean -- or all their children at kind of a higher level than maybe a counterpart teacher. Can that be explained? Could it be that -- could it be that there's an issue there, or is that actually reliable data. The other point I think comes down to, really, an education point in talking with both parents and staff. So, it's always a hard conversation to tell a parent that you have concerns about their child. That's a really tough conversation.

But there's ways that we can help parents to understand where their child is developmentally and tools that they can put into place that are going to help their child to develop. So, I think it's setting that -- setting that out front with parents and with staff that we want the data to be accurate, because if it's not accurate, and what you're telling the parents isn't accurate, then we're kind of -- we're giving parents an unrealistic view of how their child is doing, and then, when they get to kindergarten and they keep moving up the system, you could run into some issues, because that parent's gonna say, "Well, my child was doing so well in preschool, and why are they not doing well in kindergarten?" And it helps us to prepare parents and to engage parents by explaining to them that their child is here developmentally, and you we want to work on these certain steps, and we really need them to help us to get their child to where they need to be for kindergarten.

So, it's thinking about those ways in which you can have these conversations. Okay. So, let's take a look at this data. So, this is a -- this is quantitative data -- right? Because it's numbers based. So, if you take a look at this data, what is this data telling you? Because I'm going to tell you all something -- I've gotten reports like this before. What does this mean to me? Well, you've got somebody at 80 percent and, you've got -- oh, look at classroom three. They're just doing awesome. I mean, that teacher must be amazing. I don't want to downplay the teacher, 'cause, I mean, I would've strived for 100 percent when I was in the classroom, but it's unlikely, right?

Because we know that in our classrooms, not all of our children are at that level. So, if you looked at this data or if you started to think through this data, this is a very -- this is -- this is the starting point of data analysis. This is not the end point.

But I think oftentimes, we get frustrated with the data-aggregation process and we make this the end point. Like, "here we go. This is where everybody stands." But this really means absolutely nothing. First off, what's, like, the key thing that we don't know here? Right. Exactly. 80 percent of what? Right. So, 80 percent of children? I mean, we're gonna, maybe, assume that it's children, but it could be 80 percent of infants in that classroom; it could be 80 percent of toddlers. What else don't we know from this data? Right. Right here, we're basically talking about things as if the goal is the whole domain. But we know from what we talked about earlier that a goal should not be the whole domain because it needs to be changeable. What would we think about classroom three? Exactly right. So, the teacher needs more training. That's a really good point. So, it could be a couple things -- the teacher needs more training, the -- the tool that you're using isn't -- the tool that you're using isn't working in that classroom, it could be that you're measuring one child in that classroom based on this data set and that one child may be meeting all the areas because maybe that child is 3 and about to age out of Early Head Start.

We don't know a lot. We don't even know how many children we're talking about here, right? So, this is not really usable data, beyond the point of the fact that we can draw some conclusions that can help us monitor how our data is being collected. We can see from this data that we need to have a conversation probably with classroom three's teachers, find out what's going on there. We don't want to accuse the teachers, but I think the assumption would be they don't understand the tool or they're fearful of putting children at a lower level. And that's -- that goes back to the point around setting quantitative expectations on goals -- so, saying that you want 100 percent of your children to be at a certain level -- because that's -- what we're doing when we say something like that is we're putting children -- we're putting our staff into the mind-set that all of our children should be at a certain place, developmentally, and infants and toddlers are not going to be at the same place, developmentally, and we don't want to -- we don't want to mislead staff, and we don't want to mislead our stakeholders and our parents by emphasizing that all children should be at a certain point. Okay. How about this?

So, you know, we had that original data. Now you've got a little bit more information. So, classroom one is primarily 2- to 3-year-olds, they have a veteran teacher, and they have high attendance in that classroom. So, now we're adding in some qualitative data. So, this is giving us a little bit more information to try to draw some conclusions. Classroom two is primarily 1- to 2-year-olds; we have a veteran teacher in there; we have high attendance. By children, low attendance by one teacher. Classroom three, mixed age group, brand-new teachers, low attendance by children. And then home base, that kind of cuts off -- many IFSPs, the home visitor speaks only English but uses translation for some of the parents.

What does this additional qualitative data help us to do? So, it give us a little bit more information to understand. It's probably still not enough, right? We're still missing how many children are in the classroom, we're still missing "What do you mean by 80 percent?" Are we talking about every single language part of your assessment tool? Or are we talking about only certain indicators on the assessment tool? But we're getting closer, right? So, what we know is, classroom three is mixed age groups with brand-new teachers and low attendance by children. Pretty unlikely that, even though we don't know what 100 percent really, really means, probably not at 100 percent of the children meeting certain goals for those classrooms, if that's what 100 percent means. It gives us a little bit more information. And it's important to think about that when you're looking at things from classroom to classroom or from home-base program option -- or home-base caseload to home-base caseload is, what are the differences in those caseloads?

Do you have one home visitor who has a lot of pregnant moms who recently gave birth, so you have a lot of really young infants who we all know don't have a lot of indicators that can be measured for them yet? Because, they're really just starting to develop, and we really have to be careful about how we look at that development. Or do you have a classroom that has all 2 1/2-year-olds that you could probably actually get some really good data out of because those 2 1/2-year-olds are -- you're gonna have some more solid information on them?

So, it's thinking about what data you have and how that data can really be used to help you make decisions and to help you make conclusions about your program. Any questions? Okay. So, after you've pulled your data and you've started to really bring out your data, and you've grabbed that qualitative data and you've started to kind of look at how things interact, the next thing you need to do is dissect your data. So, now we're gonna take our data apart. So, you have to think about what you learned from the data, what's unclear, and is the data reliable. Because, remember, as we talked about, if the data isn't reliable, then there's no point in aggregating it, because you're aggregating incorrect information, and you're not drawing any good conclusions.

And I'll tell that you -- and I'm sure most of you have learned that, who have started using new tools with your infants and toddlers, and I heard some frustration about some of the tools -- you've learned that you may have started with a tool that you found out didn't really work for your program. And sometimes we start out with a tool that aligns with what our Head Start programs are using or what may be the preschool programs in the area are using, and then we find out, this isn't really working.

So, it's going back to the drawing board, but what that means when you go back to the drawing board and you pick a new assessment tool is that there's going to be a period of adjustment for staff. They're not going to get that tool right off the bat. It takes a while for them to learn that tool. So, we have to -- we have to think about that when we're looking at our data and when we're explaining our data, because we know from that information -- we know that when we implement new tools, there's going to be some unreliable data there, right? So, we have to think about it. So, when you look at your data and you pull that data and you see these trends in the data, that's when you start to ask questions. Okay. So, let's look at this example and talk about the accuracy of data. So, you have an age group here. You have a group of -- You have a -- You have a couple Early Head Start classrooms here. And the age group for these children is 1 to 2 years old. The sample size at the start of the year --

Does everybody understand what sample size means? So, the number of children at the start of year was 20. The number of children in this age group at the end of the year was 15. And five children had left the program. At the beginning of the year, 50 percent -- so, this is an actual report that was received, talking about school readiness, from kiddos academy, which is not a real grantee, so -- It's made up. At the beginning of the year, 50 percent of our 1- to 2-year-old children met the expectations for motor-skill development. At the end of the year, all children met expectations.

So, if you received this report -- so, say that you -- you asked your Head Start team to put together some reports on the data, and they provided this report to you on motor-skill development, what would be your first question that you would ask about this? "What were the expectations?" Great question. What were the expectations for motor-skill development? What happened to the five children? The question I would ask is, are the 20 children from the beginning of the year the same -- are those 15 that are left the same out of that bunch? 'Cause we can't compare apples to oranges, right? We can't compare a child at the beginning of the year to a different child at the end of the year.

That's not giving us reliable data. There's a lot of questions that I think you can ask from this. You can ask what 50 percent means. You know, you can ask, was that an aggregate of expectations? So, if we're talking about a couple different benchmarks that are used to measure your expectations for gross-motor development, are we talking about five benchmarks that you've then aggregated to 50 percent? Does that mean that there could be a potential benchmark that was at 100 percent and one that was at zero? What sort of information is missing?

So, these are things to think about when you start thinking through your data and talking about whether or not the data's really accurate that you're providing. So, here's another example. So this is an age group of zero to 12. At the start of the year, there were five children in this age group. At the end of the year, there were 10. And at the final checkpoint, our program showed gains and found 5 children, or 50 percent of children ages 0 to -- this is supposed to be zero to 12. I'm sorry. I meant to correct that. Zero to 12 months met the expectations for fine motor development. At the beginning of the year, one child met the expectations. So, are there different questions you would ask about this? So, again, I always go back to the fact that we cannot compare different children, right?

So, if you had a 12-month-old at the beginning of the year who's included in that original sample set but they've aged out to a different grouping, then you can't keep them in your aggregation -- right? Because you can't compare different children to each other. So, that's kind of basic statistics is you have to compare the same -- you have to compare the same child to child in order to draw conclusions. So, you can't say that we had five children in this group at the end of the -- at the beginning of the yearand 10 people -- 10 at the end of the year and they're not the same child. You can't draw an aggregated conclusion there. But what you can do is, you can look at children individually and see where that child -- what that child has progressed on and then aggregate off of those individual progressions. So if you go through and you say, "we've got 20 children who have shown progression in the appropriate -- in certain areas," then you can aggregate based off of that and say, "20 of our 'X' children showed progression in this area."

Again, we're not saying that they exceeded expectations. We're not saying they met expectations. We're talking about progression, because we're showing progress towards meeting our school-readiness goals. We're talking about how our children are growing in order to meet those goals. Because what we all know is, those really young kids -- and we talked about this earlier, 'cause I know this is the frustration point for a lot of programs -- it's really hard to measure those young children unless you measure them individually because there's so many factors that can come into play with our ability to actually use some of our tools, so it's taking into account the different structures that we've put in place. Yes?

Male speaker: Wouldn't you need a lot of narrative explanation of the data?

Hennelly: So, there's a couple of ways --

Male speaker: Supporting --

Hennelly: Go ahead.

Male speaker: Supporting -- you know...You know, just a lot of logical reasoning behind the --

Hennelly: You would. So that's where you would really -- That's where you really turn to a lot of that qualitative data. So, you would turn to some of the information that your teachers have collected, that any of your staff who have worked with the child and family have collected, to really kind of make that determination for the child. So, we can look at things at an aggregate level on the whole to initially start our progress of analyzing the data, but to really get good data about our infants and toddlers, unfortunately, you really have to drill down to each child's individual progress. Otherwise, you're going to have a very difficult time concluding anything from the data that you have because of how the systems are set up, because of how we don't want to box children into certain developmental levels when we know that they're at a different developmental stage, either because of a disability or maybe they were premature so they're technically at a different developmental stage than their actual -- their actual age. So, that's a really good point.

So, you do have to look at a lot of data. Okay. So, using data to inform the program. So, you've got all this data, you've drawn out some of your data, you've started to think about it. What do we do next? So, we disaggregate that data. So, this is where we kind of get to your point. We're looking for patterns and trends over important information. So, we're taking those big subsets of data that we've collected and we're looking for trends. Yes?

Female speaker: We have a question from the field.

Hennelly: Sure.

Female speaker: "We may get here, but part of what I struggle with is how to show the impact of our services on gains."

Hennelly: So, we're going to talk about that in a few minutes.

So, if I don't answer that question, please ask it again, and we can make sure that we hit it.

Female speaker: Okay. Let me just finish the rest of it, too. "So, especially in Early Head Start, where so much happens developmentally, how do do we tease out natural growth from program impact?" Which sounds like what you're going to address.

Hennelly: Great question. Great question. So, that's a very difficult thing to do. So, what I recommend, in terms of teasing out that actual growth versus program impact is to look -- is really taking that benchmark data and then looking at how the child is developing and are they on a typical development continuum, and if they are, then you're looking to really see if there are specific things that are happening over their development that you can tie back to program relationships. It's a really difficult thing with infants and toddlers, and I think sometimes, the way -- the best way to approach it is really to look at the goals that you've developed as a program and show -- show overall how children are growing and developing, and then using data -- qualitative data that you've gathered -- to really support that, to show how you, as a program, have impacted that.

So, we're gonna do one example in a few minutes that I think may really answer that question. But it's kind of -- It's a very obvious example. It's not a -- It's not a typical example. But it may help to kind of shed light on how you as a program can look at what your impact is on the development of a child. But what we also know is that part of your impact is helping that child to continue to develop in a certain way, correct? We want them to continue on that upward trajectory to certain outcomes and expectations that we have for them, and simply keeping them on that track and then comparing that maybe to data within the community for children of their -- the child's same age may help to show program impact. Okay.

So, when you're disaggregating, you're looking for patterns, and then you're taking those patterns and you're trying to explain why this is happening. So, you're digging into that information. And there's a couple of ways that you can dig into it. You can start by looking at enrollment in different options, the ages of children, other sort of factors that may give you some different subgroups that could give you some interesting information. So, maybe drawing out the home-based children from the center-based children and comparing them and seeing what different trends you're seeing in the data and then trying to explain it, because I think you're going to find some interesting trends that you may not expect.

So, a couple of strategies for disaggregation of data. Again, back to including your teaching staff. I think it's really important to make sure that your teaching staff are engaged and included in the process. And then -- we talked about this a little bit earlier, but we'll talk about it again -- it's looking at children individually. So, you're determining how that child is progressing. Okay. So, this is the example that -- Yes?

Female speaker: I just have a question, if you have any tips for very small programs. Because in terms of disaggregating and finding trends, we found that, because we only have 68, and even a full-year data, it's a much smaller subset of that --

Hennelly: Absolutely.

Female speaker: Getting meaningful data --

Hennelly: So. I think with very small programs -- and I think that a lot of you probably have programs that are somewhere around the 100-child enrollment for Early Head Start. Does anyone have a program that's much larger than 100? A couple programs. With those programs, it is very, very hard to even initially try to aggregate the data to then disaggregate it. So, I think that the best way to really approach that is to maybe set up a system where you have your -- each of your home visitors or each of your classroom teachers take that first look at their information and try to make some meaning from it, and then come together and talk about trends you're seeing within each of those different subsets, and then really disaggregating it down to that individual level to get more meaning out of it. But that's probably the best way to look at trends is to start first with each caseload or each classroom rather than trying to compare based on the actual age of the child, because what you're going to find is that you may have a very, very, very small sample size for certain age groupings, which then is more difficult.

So, you could look at it from kind of that -- the more aggregate level of the grouping, but then you're going to have to still disaggregate it to see what trend -- to see what -- to make meaning out of it and then also to see how each individual child is actually progressing. Okay.

So, then -- So when we're talking about disaggregating data, one key thing to think about is just the child's baseline assessment data, 'cause that's really our starting point, right? That's the first data that we have on the child. And that data is meant to help guide our analysis going forward. So, you can always analyze your baseline data, and that can help you to really draw some conclusions, but the key component of that baseline data is really going to be as a comparison going forward to really drive where the program is going. Okay.

So, let's think about this child here. So, this is an actual example of a child that was in a Head Start program in Ohio -- an Early Head Start program in Ohio. And this child started in the classroom at age 2, and he wasn't walking. And he wasn't walking. So, a 2-year-old not walking is automatically going to put him much lower on any of our assessment systems in all of our developmental assessments -- everything. He's going to score much lower. Well, the first thing that the program did was obviously get the appropriate intervention. So, clearly, there was an issue going on.

To give you a little background, this 2-year-old had a teen mom. She was 15 or 16 years old, didn't have a lot of support, and then finally found out about Early Head Start, and they were able to get the little boy in the classroom. And he's the cutest thing. So, they got him into the classroom, and he's now almost 3. And he's starting to walk without aid. But for the longest time, he had a brace on. So, if we're thinking about his assessment results, and why it's important to look at children individually at times is, this program clearly had an impact on this child, right? If he hadn't been in the Early Head Start program, he probably wouldn't have received any sort of intervention. I mean, hopefully, he would have gotten into the Head Start program or into some sort of Early Intervention system, but it doesn't sound like his mother, at the time, really understood any of that. She was 15. She was young. She didn't have good insight into, like -- into what to do for her child, and she didn't have a good support system.

So, what we know is that this child started in this program, he wasn't walking, he needed a brace on his leg, he had some developmental issues associated with his actual physical development, and -- but, with the assistance of the program, they were able to get a brace on the child, and he was able to start walking. So, what's gonna happen? What we know is that that program has had an impact. But if we were to aggregate the data based on the assessment system, that child is still going to be very low on the assessment system that this program is using. Because he's still not where you would expect a 3-year-old to be. But what he has shown is he's shown gains, right?

He's shown gains from where he originally started, where he was baseline with that program, to where he is now. He's not going to be exceeding expectations in anything anytime soon. He's still going through physical therapy and going through a lot of those things that he needs to go through in order to get to -- to continue to develop, but that program has had an impact, and the child has shown development. So, he's moving closer and he's showing development, and he's moving closer towards meeting those school-readiness goals that that program has developed. So, he's -- he's showing progress towards meeting that goal, right? Yes? Absolutely. Oh, hold on one second.

Female speaker: We have a lot of Early Intervention children in our Early Head Start program, and currently, we are tracking our data using TSG, the continuum checkpoints, and I don't believe that we are pulling any of our E.I. children out of our collected data. So, are you suggesting that's what we should be --

Hennelly: I'm not saying that you remove them from your analysis.

Female speaker: No, not remove them but that we should be--

Hennelly: But I'm saying that you look at it differently. So, I would think, with your infants and toddlers, you're going to -- what you're going to want to do is you're going to want to look at them each on an individual level, to see how those children are progressing towards the goals that you've set for that child, which, in turn, turn into the goals that you've developed for the program. So, if you have a child who, you know, is receiving Early Intervention, they -- they're going to be at a different level, initially. Their baseline's going to be lower, and they may not, from your data, ever show that they even hit -- I don't even remember the names of the different checkpoints for the goal, but they don't hit -- they're not meeting. You're never gonna see that -- they may never meet expectations for a certain checkpoint just because of whatever their disability is, but they're showing growth towards that checkpoint.

And that's what you want to capture as an Early Head Start program is you want to capture that growth, because otherwise, your data is really not going to tell you much because you're not looking at it from the right viewpoint. So, when you aggregate it, you're always going to have those children who are not -- who are not going to meet those specific points just because of where they stand developmentally. So, when you're explaining your progress towards meeting those school-readiness goals, you could explain that we have, you know, X, Y, Z number of children who are on IFSPs and receiving Early Intervention, "and from the data, we've found that 70 percent of these children continue to progress on their -- to progress towards their individually developed goals, which meet our established school-readiness goal."

So, something of that nature, where you're continuing to show that growth but you're not trying to aggregate it with children -- with all the children and expecting all children to be at a certain level at a certain point. Yes?

Female speaker: We have another question. Excuse me. "In your disaggregating data example, this would require a great deal of interviewing or storytelling from teaching staff. Do you have recommendations about gathering these stories, qualitative data, when we have larger programs?"

Hennelly: So, the first thing I would recommend is that whatever assessment system that you're using, that you're really taking care with those anecdotal notes that you're writing down. So, teachers should really be taking down anecdotal notes in some capacity, be it typing them into the system or handwriting them -- however you've determined to use it within your program -- and that's really kind of what you can call memory joggers for teachers. So, if they read one of their notes that they've taken, that may then jog their memory to a specific point of time with a child. I don't know if you necessarily need to do a full storytelling about each child. I think it's those notes that are really going to guide you. And I'm not sure how you can pull those down from the many different systems that I know you all are using, but I'm assuming there's a way that you can pull down the anecdotal notes that the teachers have entered.

I see a lot of heads shaking yes. And I think that's what you would pull, is you would pull those and you'd look for trends. And again, you're looking for trends. So, if a child is -- if you -- if you believe the data is sound that you have in front of you and that the child is -- you don't have concerns about the development and concerns about that nature, you may not need to pull those anecdotal notes on every single child if you trust your data. But if you have a child who has a disability or a child who is newer to the program and you're trying to monitor them, you may want to pull those notes to, "a," check and make sure that your teachers are appropriately entering the information and that it's reliable, but then also to help draw meaning about certain -- about the child.

So, it's really drawing it when you need it. I don't think that you necessarily need to draw in on every child. It just -- it's kind of a case-by-case basis, and I think that, you know, you can probably think about it right now, and a lot of you, I'm sure, are, about the children that you would be more interested in drawing down notes on than children you have observed that you're confident in their development and the assessment tools that you're using. Good question.

Okay. So, I want to get moving, just 'cause I want to get to the next part of the presentation that really talks about providing data out, but some things that you always want to think about is, when you're thinking about disaggregating your data is, every program is required to have an assessment tool, but that's not the only tool you need to use when you're looking at your child's --each child's development. So, your screening tool, and I know a lot of people are very, very comfortable with the screening tools you use on your infants and toddlers, is a really great way to compare what you're seeing from your screening tools to what you're seeing from your assessment tools and to see if you're picking up trends. And oftentimes, this is a really great way to see if the data that's being entered in your systems is reliable, because a lot of our teaching staff are more comfortable with some of these screening tools that we've used because we've been using them for years and years and they've had much experience with them, but when you compare that to your assessment tools, what are you seeing there?

What kind of information can you draw out? Are you seeing that the assessment tool is telling you something totally contradictory from what the screening tool was telling you? What sort of information really comes out of that? And then you want to ensure that your reports have usable information. So, this gets back to the point about you can't compare infants at the beginning of the year to infants at the end of the year, because they're not the same group. So, in our Head Start classrooms, it's really easy to compare the kids at the beginning of the year to the kids at the end of the year, because that sample is usually pretty close to the same. With our infants and toddlers, those children are moving from different categories and your tools to -- on a constant basis because of their growth and development, so you have to be careful about how you're comparing children.

So really, the -- it's looking at it from the perspective of making sure that your comparisons are usable comparisons. I can't compare Tommy to Timmy because they're not the same child. I can't say that just because Tommy started at one level in our assessment tool and Timmy ended at a high level that we showed growth as a program 'cause they're different children. Does that make sense to everybody? Great. Okay. So this is an example of an activity that you can do with your staff, and we're not going to actually do the activity today, just in the interest of time, but this is a scenario that's occurred within a program. So, star studded Early Head Start, a 90 percent home-based program and a 10 percent center-based program, is in a rural area.

Upon reviewing their school-readiness data, they found that infants and toddlers across the board were not showing appropriate gains in gross motor skills. And so they decided to investigate this and find out what was going on. So, they started the process of looking at the data. Now they're really drilling into the data. So, star studded Early Head Start created a school-readiness team to evaluate the situation and to develop a plan. So, then what you could do with your staff is, in a small group, they could talk about who should be included in the team, what type of data should you look at, what are some possible reasons for the low gains in gross motor, what systems need to be adjusted, what budget considerations need to be made, how will the plan be implemented.

So, it's thinking through the whole process of not only do things -- things don't stop at just finding out the information you need around your progress towards the school-readiness goals. It goes further to, "What do we need to change within the program?" You know, if we're seeing that certain things are consistent, what changes need to be made? Do we need to implement supplementary curriculum? Do we need new materials? Is there training needs? Are there advocacy needs? Is the issue in the environment? What's going on? Okay.

So, this is the last section that we're going to talk about, and it's on reporting your data. So, we're going to talk about the types of data and how you share those. Okay. So, part of the 1307 regulation is that programs are required to use data to inform parents and communities of the results -- of the results of your school -- your progress towards your school-readiness goals. So, this is kind of a typical data-analysis process. If you Google data analysis process, you'll find a couple of different ones. It's really based on kind of the type of data that you're analyzing. But what you need to think about when you're doing -- when you're analyzing your data is that full process that you're going to take.

And this, again, would probably be part of your school-readiness plan. You'd want to talk about what the process is that you're going to use. So, you want to define your process and outline your method. You want to describe your sample set. So, if you're -- if you're going to draw a conclusion on just your toddlers, you would want to define that. If you want to draw a conclusion on the Early Head Start program or on the center-based program versus the home-based program, you want to create graphs and charts, you want to draw conclusions and make comparisons, you want to explain the purpose of the analysis, you want to explain the results, and you want to use qualitative data to support the analysis.

So, I'm going to flip the slide, but these are on the next slide. Does that work? Okay. Okay. So, when you're talking about defining the process, that's the time in which you think about how you're going to gather your information. What's your school readiness plan? How are going to -- what's the process you're going to take? Are you going to aggregate three times a year or are you going to aggregate four times a year? When are you going to draw down your data? What other data are you going to use? How are you going to make sure that that data's reliable? And then you're going to describe your sample set -- how many infants and toddlers are enrolled? For this specific analysis, are you looking just at center-based children or just at home-based children or just at family-childcare children? What children are you looking at for this analysis? And then you want to create your graphs, and these are your graphs and charts, and graphs and charts help as a visual with the explanation of data.

However, we can't just have a graph and chart without some sort of qualitative data to support that. So, that's a key to always remember. You want to draw conclusions. So, you've got your graph, you've got some qualitative data, you've thought about things, you've gone through your process and method, and you've drawn a conclusion. So you've said, "We can confidently say that our children are showing progress towards our school-readiness goal because X, Y, and Z," and we'll talk a little bit about the explanations in a minute. You explain the process, so that's the because -- "because we looked at this and found that 'X' number of our children showed growth in this area." And then you explain the results -- "so, because of that growth by the children, we know that the children are developing and progressing toward the goals that we've established for them." And then, of course, it's bringing in that qualitative data. Question? Okay.

So, the important thing to think about when you're thinking about sharing your data and actually creating a report or creating a method of distributing the information is, who's your audience? So, we're gonna talk very differently to our teaching staff than we're going to talk to our governing board about school readiness, right? We may use terminology that's different, we may go more in-depth with our teaching staff than we would with our governing board, we may talk differently to the schools than we would talk to just the local community, in general. It's thinking about who's your stakeholder and who's your audience. So, we may not share the same data with everyone. We're probably not going gonna share individual classroom data or individual child data with the community, unless we have some sort of sharing agreement. But what we may share with the community is our aggregate information, so those broader conclusions that we've drawn. And then same with the governing board.

They probably aren't as interested in each child's progression as they are more in what we've aggregated and what we've found from our assessments. Okay. So, we're gonna look at a couple examples of information that has been shared from programs to the regional offices. And there's no names or anything like that, and, you know, if -- it's -- it's just an example, and it's a starting point to talk about where things should go. So, just to go back to 1307, we need to make sure that we use multiple sources of data -- right? -- when we talk about our progress so it's not just that assessment data from your school-readiness assessment. It's drawing in all those other data sources that we talked about earlier. Okay.

So, here is a statement that we received in a grant application from a program about their children's development. So, their school-readiness goal was "children will develop positive relationships with adults and peers." And this is what they told the regional office in the grant application that they had found. "At the end of the year, our program found 80 percent of children met expectations in the social-emotional domain." Okay. What's the first thing that pops out there? The 80 percent. Okay. What does that mean? Great. How about they put the goal here that children will develop positive relationships, but then it looks like they're measuring the entire domain, not just the goal, right?

So, that's kind of something that we want to know -- like, "Why are we looking at the whole domain when the goal is not encompassed by the whole domain, or with -- you know, we need different benchmarks for the specific goal." Does it provide us with a lot of good information? Yeah, it's kind of vague. It doesn't really tell us much, except that 80 percent of children met expectations. I don't even know what "met expectations" means. What does that mean? For an infant versus a toddler? But that's a starting point. So, you could start there -- right? And then you could build upon it and you could say, "by 80 percent, we mean da-da-da-da-da. By expectations and social-emotional domain, it's the specific indicators listed below." You could build on it. It's just a starting point. It's not the full explanation of progress by the program towards the school-readiness goals. Here's another one.

I'm sure some of you have seen this report. Okay. So, we've got the goal here -- children will demonstrate positive relationships with adults and peers. We have what appears to be three different objectives that are measuring the goal. It's not completely clear, but you could maybe assume that. Is this a little bit better, worse? What do we think? Worse? It's misleading?

So, the first thing that we'd want to know is, you have a sample size of seven. So, "N" equals 7, which is the international term for sample size. And equals 7. We know that there's 7 children. They -- we've got all of them, apparently, meeting 2a and 2D. I don't know what 2a and 2d are, but... They're both meeting them. Or all of them are meeting it. And then you've got 86 percent and 14 percent. So, basically one child in six children -- six children meeting -- meeting expectations for 2c and one child exceeding expectations. So no one's below, which is pretty unlikely, right? Yeah, depending on the age, but it's pretty unlikely for infants and toddlers to see something like that. But isn't this just kind of telling me what the data says now? I don't know where these children were at the beginning of the year, so I don't know what progress has been made. So, you can tell me where they stand now, which is great -- it's great starting information, right? But I don't know what progress the program has made towards the school-readiness goals. All I know is that, right now, it looks like the children are pretty much meeting this -- the different indicators the program has developed, but this is just seven of the children.

So, it's a starting point for information, but it's really not getting me everything I need to know. Okay. And we've got one more example. Okay. So, this is a school-readiness goal, and I'm sorry that this is all wordy. There's no graph with this one. "Children will develop positive relationships with adults and peers." And then the grantee said, "to measure the goal above, our program identified three benchmarks from our assessment tool that directly relate to the goal. The three benchmarks are...," and they identified three different benchmarks that were what they're using to measure.

And then to ensure adequate analysis of the data, only children who are enrolled for at least two checkpoints during our program year are included in the data. A total of 80 children were enrolled for two checkpoints. So, so far, we know what their goal is. We know what their method was or what their starting point was and how they decided to do their analysis for this goal. And then we also know what the benchmarks are. Even though they're not written here, we would assume that they've provided those. And then this is the description. "At the end of the year, our program found 50 percent of infants and toddlers showed gains in benchmark one; 100 percent showed gains; in benchmark two, and 90 percent showed gains in benchmark three.

Overall, we determined our program showed progress towards meeting our social-emotional goal. However, we have concerns around the specific progress of children towards benchmark one. From the aggregation of data, we found toddlers showed the least amount of growth in benchmark one. We can explain some of the low growth due to the rapid growth in brain development around age 2 and the aggressive tendencies common as a result of the development stages associated with children at 24 to 36 months.

We also learned children in our home-based program seemed to show less gains in benchmark one, likely due to less social interaction. home-based children who attended socializations and additional play groups showed slightly higher gains in benchmark one than children who did not attend. We will continue to emphasize training regarding benchmark one as this benchmark..." Sorry. There should be an apostrophe "S" there. "...Indicated training needs for both staff and parents to ensure adequate changes are made in classrooms and during home visits." So, this gives us kind of a better picture, right? I made this up, by the way.

But my point behind this is, we're not -- we're showing progress towards the goal, right? This is explaining what you as a program have done and how you've used your data to show how you've progressed towards the goal, but it's not just one number on a chart hanging there. You've actually explained something here. So you've said, you know, "We -- We dug into this data, and we found that our home-based children seemed to show less gains in benchmark one." And then we dug even deeper and we found the home-based children who never attended socializations showed even less gains -- or, consistently showed low gains in this area. It's looking into that information and finding reason behind it, and the reason you want to do that is because that helps you as a program to really look at how you want the program to be developed and how you want your trainings to be established.

So, it's thinking about how -- This isn't just another thing that you have to do. It's really meant to help you as a program to grow and develop using all that information that you already have. So, I know it's wordy and long, but it took me about three minutes to kind of write up, so once you get all your data, it would probably be a lot faster to write up, so... This is just an example.

So it's -- you know, it's up to you as a program, but I think that if you're doing yourself the due diligence of actually being able to use this data to make meaning from it, it's probably helpful to think about it and, you know, think about it beyond just "we found that our children are progressing towards the goal." It's explaining that, "yes, they're progressing, but we're finding that maybe in a certain area, they're not progressing as strongly. One of our benchmarks that we're attribute to the goal, things of that nature. So, yeah, absolutely.

Female speaker: Should your wording of the report be written differently towards your specific audience?

Hennelly: That's a very good question. I would recommend that. I would think that you would change your wording, you would change some of the terminology or explain the terminology more, depending on the stakeholder. For your teachers, you're going to use probably higher-level terminology than you may use with -- because they understand that terminology -- than maybe with the community, who you want to kind of explain it for. Yeah. Yes?

Female speaker: In the example that you gave, there was actually a group of children who were not included in this because they were not there for two checkpoints. So, you probably want to remember to say something about the children who were...

Hennelly: Very good point. Right. They were -- you know, they're still part of the program. So, there has to be some kind of acknowledgment of that, particularly if it's your children.

Hennelly: Absolutely. That's really good point. So, you know, this analysis was done based on the children who we had data that we could actually analyze on. With some of those other children, we might just have their initial baseline data, because say they started the program in June as Early Head Start children when we were starting to do our aggregation, so you'd want to -- you'd want to acknowledge those children and say that we had this many children and explain why maybe for the purposes of determining your progress, you didn't include them, was because the data -- you didn't have any data to compare for them, so you couldn't affirmatively show what their progress was yet. Very good question.

Female speaker: Hi. Could you just go back to the previous slide for a second?

Hennelly: Um... Yes, there we go.

Female speaker: Thank you.

Hennelly: Absolutely. Did you have a question on it or you just wanted to see it?

Okay. Absolutely. Yeah?

Male speaker: Only 'cause I did a training on this recently at the NAEYC Institute in Minneapolis, one of the things we looked at -- and I think especially for very young children -- is looking at the assessment pieces that either QRIS systems and/or Head Start are using, whether it's the class for infant and toddlers. You know, because to me, especially with young children, those types of environmental influences, and I include the teacher and the caregiver as the primary components of the environment -- to me -- I don't know how you'd write them as readiness goals -- but for me, I think they're sort of integral, talking about young, very young and what the readiness goals are for your program, which might include, you know, staff, parenting types of things.

Hennelly: Sure. So, I think a good way to incorporate those would be to think about those also as program goals. So incorporating the school-readiness and the program goals together, in terms of the expectations for teachers and the expectations for the children, but that's a really, really great point is that, with infants and toddlers, it's absolutely correct -- the caregivers, the parents, the environment that the child is within -- is a huge indicator of that child's growth and development, can really help you as you start to analyze that data around the child. Knowing what that child is going home to every night may really help to you understand why that child's social-emotional development is not -- is not where you'd like it to be.

Maybe, that child is in distress when they're not in the program. So, it's thinking about those stressors in children's lives, too. Very nice point. Any other questions? Okay. Well, I want to thank everybody for coming today, and please feel free -- I'll put my e-mail back up. Please feel free to e-mail me if you have any questions and we -- enjoy the rest of Birth to 3. Thanks.