

Webinar Trascript
“Using Student Progress Monitoring in a Response to Intervention Model”
September 26, 2007

We're going to go ahead and get started now. Good afternoon, everyone. Welcome to the National Center on Student Progress Monitoring webinar. We'll be getting started in just a few moments but before we hear from the presenter we would like to review a few technical details about today's event. We trust you've had success logging into the technology but if you encounter any technical difficulties at any point during todays session we'll ask that you please contact the live meeting technical support staff at 1-866-493-2825 and I'll go ahead and also type that into the question an answer box. We'll post the phone number in the window for you in just a minute.

Dr. Hins will have a formal question and answer time at the end of the presentation and may pause to take questions throughout. Please feel free to use the question an answer window throughout the session to type any questions you have regarding technical issues or content questions. The Q & A box is located in the bottom right hand side of your screen. In order to type in a question, place your cursor in the box , type your question, and click " Ask". Once your question has been sent to the presenter, someone will respond as quickly as possible and will post an answer to the group. Please note you're anonymous and no names will appear in the question box. If you prefer your question be answered privately, please specify that in the text box when you ask the question.

We're pleased to have our event captioned in live time by a captioner who is joining us online today. You might have noticed that a special box popped up on your screen when you first entered this session. That is where you will be able to access the realtime captioning transcript. You were prompted to enter your name and organization so the captioner will have that information. We encourage you to resize the captioning window to size it to your needs. You may also move it to a more convenient location by clicking on the top of the box and dragging it with your mouse. If you do not prefer to view the captioning please feel free to close out of the window and it will disappear from your view. If you have disabled the captioning box and would like to restore it, simply click on view, and then pane sshing and show custom channels an this will restore the captioning.

Finally a note about the audio portion. We will be recording this event so it can be available online later for those who missed it today. In order to produce the best quality recording, we've muted all of your phone lines to minimize background noise. The end of the presentation we'll offer you the opportunity to speak to the presenters to ask any remaining questions. At this point, we will begin the recording.

Good afternoon. My name is necessary had Short and I'm pleased to welcome you to our webinar on behalf of the national center on student progress monitoring. It is a technical assistance center fund by the Office of Special Education perhaps. The centers mission is to provide technical assistance to states and districts and disseminate information about progress monitoring practices

driven to work in different academic content areas, grades K-5. We're pleased you could join us and we hope you'll find this online learning opportunity to be fruitful and relevant to your work.

We're fortunate to have Dr. John HINS sent to us by using student progress monitoring and intervention model. Dr. Hins is an associate professor in the school of psychology program at the University of Massachusetts and also one of our center trainers an technical review committee members. Dr. Hins has done extensive writing on be haevr your all and functional analysis including curriculum based monitoring. It is my pleasure to turn things over to Dr. Hins.

If you could just unmute yourself, Dr. Hins, it's Star 7 ?

Now?

Yup!

I'm on now?

Yes!

Okay, sorry about that. All right, well, welcome, everyone, and thank you, Sarah for that nice introduction. As Sarah said, I work with a national center and I'm also the Director of training here at the University of Massachusetts. If I break into what sounds like theCorup I'm coming on the tail end of a cold so you have to hang in with me there a little bit.

What we're going to talked to about is progress monitoring and how progress monitoring we think can fit within a system of RTI, intervention. I'd like to say that what the presentation today that you'll see is a combination of both materials that have been presented previously from the Center. We've done workshops over the last couple of summers but also some of my thoughts and experiences as we've worked with schools in Western Massachusetts, so, some of it is large majority of it is the Centers but some of it is mine as well from the University.

If you're interested, you could go and look at some of the previous Summer workshops and compare the two if you want to see what some of the differences were.

What I'd like to do today is kind of provide you an overview of an RTI working model that we've been using here with schools in Western Massachusetts, and talk about some of the key features of what we think comprise an RTI model, specifically goal setting, how to make decisions on ongoing data, and then how children, how those different decisions and use of data move children through different tiers of a model.

The other thing I should say also as kind of a backdrop, we're as new to some of the nuances of RTI since the re authorization of IDEIA. Much of our experiences come early on from reading first wherein this State, we were using many of the kind of similar procedures that you would use in tiers 1 & 2. So, with that as an overview, let me begin.

I'll talk a little bit about our working model of RTI, because I think that's important you see if anyone has kept up in the journals or purchased books lately, you see that there's no one single operational model of RTI, but I think it's important for us to go over it, at least put into context where I'll be talking about today.

Our notions of RTI is comprised of a multi-tier prevention system. Probably the most popular type and the one that I will be talking about today is the three tier model where primary prevention serves as Tier 1 and I'll be talking about that as we go through an primary prevention is really when we're talking about the general education population. In all those children serve under the roof of a school.

Tier 2 is comprised of secondary prevention and I'll talk a little bit about that later because I think that's where you'll see some variation around the country as to what comprises secondary prevention within an RTI model. I'll talk a little bit about how we do it but I think I'll try to speak to some other perspectives of that as well.

And then, um, third is our third tier, we call it tertiary prevention and oftentimes that's for our children who are most struggling or perhaps even in special education and again I'll speak a little bit about Tier 3 because I think there are different perspectives around the country as to what comprises Tier 3 or should we even use a 4 tier model I've worked with districts in the country using that as well.

We like to think of everything sitting within the 3 tier model as comprised of if we think of big ideas, borrowing from some of the terms like colleges, what are some of the things that are key dimensions that we need to keep in mind as we work within our 3 tier model. We think of three basic things. Instructional tasks, assessment tasks, and then administrative and/or managerial tasks.

Instructional tasks are those types of things that we need to be aware of that pertain to each step in the model, so for example, in Tier 1, Our instructional tasks are largely geared towards considerations of the core curriculum or the curriculum in which general education students are being presented. In Tier 2, it might be those types of supplemental and/or Remedial type of efforts that are designed to meet some of the needs of children who are not meeting with success in Tier 2; however, are struggling to the point where perhaps they need more individualized type of instruction or special education in Tier 3, and then in Tier 3 as I just noted the kind of instructional tasks are usually individualized or they are the types of things that come out of research efforts or small groups that we need to use and tailor to individual learning needs and I'll be talking about these as we go along.

Our assessment tasks parallel those with our instructional tasks. Our assessment tasks in Tier 1 are geared towards all children in the school within the general education population, and we'll be talking about benchmark assessment and how that, how do we use dynamic indicators, basic skills in order to assess the academic development of all children during the course of the year.

In Tier 2 and Tier 3, we'll shift the focus a little bit about talk about more frequent progress monitoring and by frequent, I mean anything that would occur from at the very least twice a month or once a week to multiple times during the week.

what's key there and I think is probably an underscore, the title of the presentation is that the notion of progress monitoring fits for all children, and that is to say that children and special education should be progress monitored, children who are struggling and might perhaps need basic remediation need to be progress monitored and students who have more challenging learning issues or those in special education might also need to be progress monitoring. So, progress monitoring permeates the whole design and is not just on an as needed basis.

However, the way it looks will differ as a function of what tier you are in the model. And then lastly the administrative and managerial tasks are the types of oftentimes behind the scenes but there's the data decision-making teams, how we use instructional support teams, how we integrate different types of instruction or remediation into the different tiers in the model and the like. I won't be talking too much about that today, but suffice it to say that that's a busy time too, and then if any of you are up and running with an RTI model, probably one of the things that you went through a presentation like this today to say well this is pretty easy, it makes sense to me, once you start operationalizing it, there's a lot of managerial and task Management that needs to go on.

But in any event those are the three things we try to monitor all the time when we're implementing our model. Instructional assessment and then administrative or managerial tasks.

The other thing that I think is important for you to know up front is how we define responsiveness to intervention, and we use and borrow heavily from the work of Doug and Lynn Fukes and other colleagues using the dual discrepancy model so that a student would have to be both discrepant, and I say with a little d there, discrepant relative to benchmark standards and we'll be talking about what those are later on and then also discrepant with respect to some rate of improvement or growth standards. And we will be talking about those more later on as well.

You've probably all seen some figure like this, you're hard pressed not to see a figure like this associated with many preventive efforts right now but I think it's good to see. Actually I was at a workshop recently where I saw Ohio uses a two dimensional one where the base of it has other things sitting at the bottom, but we define primary prevention kind of as the whole continuum, that is all children within that pyramid there would receive some type of primary prevention and again, that's the kind of things we think about as occurring with it, school wide or class wide instruction or the core curriculum, if you want to think of that.

The yellow, and we generally, we would like to see about 80% of our students responding to the core curriculum when I mean by when I say that is that they're meeting with success with with the core curriculum that's being provided within their general education setting.

The yellow area as you can see designates about 15% of our students and again these aren't hard an fast, but we generally anticipate these types of figures, about 15% of our children at any one point in time might be in Tier 2 and that again would mean that they were receiving the general

education curriculum back in their classroom but also, some type of supplemental instructional assistance as well that would occur in combination but in addition to the core curriculum.

And then lastly, we anticipate about 5% of our children who would be struggling quite a bit and may require either a combination of a core and some supplemental or some individualized type of instruction or students in special education receiving special educational services would also be, could be in there as well. And I'll talk about some of the differences there because I think there's some discussion too around the country as to who are the children who are in Tier 3. Are they in special education or not?

There is actually some support for these percentages, sometimes you'll ask me where did these come up from and Joe BPetts has actually demonstrated that, at least these kind of basic figures would seem to make sense in most cases.

So that's kind of a operational model. What I'd like to do is kind of go over the basics of each one of the tiers. Kind of talk a little bit about what we're doing at each one of those tiers and then get into some of the basics of setting goals and also then making decisions later on.

In Tier 1, all students receive research supported core curriculum and I know you're probably all familiar with the kind of buzzword now, but that's to say that all students receive some type of curriculum that at least for our purposes meets the five kind of amino acids as put fourth by the national reading panel, that is phonics, fluency, vocabulary and comprehension. And again I would think you would probably be hard pressed to find a curriculum developer who at least doesn't attest to having those. Right now, within their curriculum, but we do our best to try to make sure that each point of those elements is present within our core curriculum.

Again, if you can find commercial curriculum that has been put to the test so to speak or to what works clearing house type of test, I would use that as well but currently, I don't know that we have those, any of those available.

Also, all students receive research supported core curriculum. All students are screened at least seasonally and by seasonally I mean generally Fall, winter and spring, at the very least three times a year. Some schools do four times a year, but we feel pretty comfortable with three times a year. So, beginning pretty soon here for many of the schools that we work in, we're gearing up for what we call our benchmark assessments, and what we'll be doing then is administering some basic screeners, assessments in areas of basic skills like reading and math and spelling and written expression, all with an eye towards trying to determine or find those children who might be at risk as compared to some benchmark standards.

I should have probably said this earlier on too but throughout this presentation, I'm going to make use of curriculum based measurement as on the assessment tools that we use to assess student functioning through the three tier model but those are not the only tools that you could use, and I would encourage you if you're just starting out in the process to think hard about what choosing a set of tools that are going to be able to answer the questions that you need answered in your specific context.

The National Center of Student Progress Monitoring does provide some of that service and has evaluated a large number of potential progress monitoring tools through their, through one of their working groups and you can access that through their website which is on the first slide of this handout. And we get to that, you'll see I think it's under " Measures " you'll see a large table that looks like a consumer reports guide and you'll see at least how those have been evaluated by certain people on that committee.

But in any event so we'll be talking a lot about curriculum based measurement so when I say we screen children seasonally, what we are doing in fact is then we're administering to all children CBM probes in reading, in math , and oftentimes spelling, and then comparing them to some standards and making decisions.

We'll talk again about specifically how we do that as we go on.

So those students who come out of our screening that we suspect may be at risk for some kind of basic skill problem would be maintained within their primary prevention or in Tier 1 for anywhere from six to eight weeks. Sometimes we go at least, or I should say four to eight weeks but oftentimes about four to six and this is something I think that's a little bit different as I talk to folks around the country and really something that comes out of vander built University and the main reason we monitor their progress during that time, you'll see how we do this in a little while. At least weekly, to see if and how they grow over that point in time, and you'll see some examples of this in a few minutes, but oftentimes, we might have children who were just around the cut score or maybe just below the cut score for being at risk, and we don't want to make the determination right off the bat that they are, that they belong in Tier 2 because it might have just been the timing of the assess ments rather than the actual students performance that better describes the performance of that time.

So for example, if we were, I don't know, say a cut score was 50 words correct per minute at, you know, the Fall of a given grade, and Johnny, if we assessed him next week and he had a score of 48, it's just below that cut score, probably within the standard error of measurement as well, and we would want to monitor his progress for a couple weeks because we would like to see maybe at the end of three or four weeks, he's actually a 52 or 54 words correct per minute and is probably looking more like a Tier 1 student than a Tier 2 student and it allows us to look at that dynamic aspect of learning over the time and really allows us to confirm or disconfirm the status of a student in Tier 1 as you can see down there below.

For those children who we believe are at risk in Tier 1, they would then be provided with supplemental prevention or supplemental and structure intervention and here I wanted to speak a little bit about this because, who had my highlighter the? Um, because this is where there is probably some, you do see some variety around the country as to how people operationalize Tier 2 and probably the three most common ways is one, a problem solving approach and then that's really an approach that was popularizeed by colleague s at the University of Minnesota where students might go through problem identification problem certification and intervention would be design, evaluate the intervention and work through the problem solving model and in that sense almost nearly all children who were in Tier 2 then, their learning needs might be attempted to be addressed on an individual level.

The second approach is called oftentimes referred to as the standard protocol approach, and that would be we typically think of those types of things that are approaches or interventions that are born out of the literature that we would be able to provide some kind of protocol to implement and provide it to children and then monitor the effects of that. And so for perhaps for example, repeated readings might be an example where you would take a repeated readings intervention, develop a protocol, use that protocol so all that all teachers would be doing it the same way, and then monitoring the effects of that intervention over time.

And then the third and I actually haven't seen this, hello? Oh, okay, the third, actually the one that we use that I haven't seen specifically written about is what we just call supplemental or manualized intervention, and it probably fits somewhere between problem solving and standard protocol but what we're talking about there is the types of commercially available products that are now available and actually, there seems to be kind of an explosion of them since RTI and the reauthorization, but there are things like Wilson Reading or Road to the Code. The kinds of things that we could provide to teachers that they could go through the teachers guide or the manual and with some minimal amount of coaching and training be able to then to use with students in Tier 2.

We use much of the materials from the Florida Center for Reading Research in trying to come up with a cadre if you will of different types of things we would use at tier 2 as well as some of the materials from the What Works clearing house as well.

So it's important to keep that in mind because as we, what we have done in operationalizing that is used kind of this manualized approach and again, the real reason that we do that is we feel that we can reach more children in Tier 2. The challenge then is picking the types of interventions and matching them to the types of needs of the children that are coming out of Tier 2 and I'll share one story.

A number of years ago, it was interesting because I think it has an effect on the way that you define your Tier 1 instruction as well, number of years ago, we found working with a school and we noticed that a lot of kids were having just basic fluency problems. We didn't feel there was any kind of a problem with the code or anything else. We thought it was just basic fluency so we started using Read Naturally with a number of the students. The next year, we saw pretty positive results. We saw upwards now of approaching to that 80% of our students benefitting from Tier 1 or the core instruction.

The next year, the school decided to just make that a part of every classroom, so they bought in every classroom and every child in the classroom went on during the week and what was interesting, two things were interesting about that. One is they did meet the rate of percent benchmark, that 80% of their children were now reading at a level they expect based on seasonal standards but two, it changed the nature of the core curriculum. The core curriculum now was the commercially purchased curriculum, plus read natural and I think it's an interesting way of thinking about what is the core curriculum exactly, because oftentimes, one way to think about it and I think probably the most common way to think about it is the core curriculum is what you purchase from the curriculum developer and then you present it with integrity and the other

way to think about it is what do we need to provide to our student population in order to get them about 80% of them responding to or profiting from instruction? And that's a different way of thinking about the core curriculum and I think it's a bit more sensitive because now we're not talking about our school district has a number of students who are X and that's the reason why we can't get to 80%. Well, it flips around this year and says well, we need to then present this certain combination of instructional techniques in order to get our children to 80% of them responding.

Students, the supplemental manual intervention is provided with flexible groups from anywhere to about 10-15 weeks depending. Students progress is monitored at least weekly and again, here we use alternate form curriculum based measurement probes in areas of reading and math and spelling and written language, and then we plot, we chart their progress weekly.

Students who were responsive, students responsiveness is assessed continually. Students who are responsive to Tier 2 intervention then are returned back to Tier 1 and students who are underresponsive, and I prefer underresponsive than unresponsive and unresponsive sometimes sounds like that, you know, children aren't making any progress. Often times you'll see that a child or a group of children is being or are responding but they aren't responding at a level which we would expect so that's why I prefer the term underresponsive, and those students then would move into Tier 3.

In Tier 3 then, we provide more intensified individualized intervention, and here again is where I think you see some variability across different a different approach in one respect and the one that we try to support is that we would then try some of those types of things that may be in other approaches you might see in Tier 2. For example, maybe things like repeated readings or oftentimes during Tier 3, we might start to do more diagnostic assessment and see if there are particular breakdowns in a specific skill area and try to identify, are there specific learning needs the student has that if we fill in those gaps they could get back into tier 2 and relatively quickly.

For those students the difference between tier 2 and tier 3 is kind of blurry. The difference is that they are getting something that's a bit more individualized than they would get in tier 2 which would be the manualized type of curriculum. They will be getting something a little more very wallized or at least more attentive to their needs oftentimes we'll find there might be a group of three, four, five children who have the same needs for example, maybe in phonics and we can provide them intervention and get them back into tier 2 without having to go into what is another option is some people would say once you get into tier 3, it would be special education.

Oftentimes, the interventions are the types of things that you're doing in tier 3, not under special education, looks like special education or specialized forms of instruction, and the only difference would be then for those children who are either not responding or underresponding, or who we suspect will always need that prolonged type of support, they then might find themselves being eligible or classified for special education so I guess depending on the way you look at it it creates a three or four tier model but we have these kind of two decision points that we like to think about in tier 3.

The main reason we like to do that also is that we know that for some children that once you fill in that learning need or you're able to identify that with good diagnostic assessment and get them back on track or back into Tier 2, had you classified them as if they were then in special education, it would be very hard to get them back out after only say four or five weeks. It would be very difficult to go and say listen, a couple weeks ago we thought your child required special education but we did a good assessment and we think we've filled in the gaps and they're eligible for tier 2 and now we'll take them out of special education and you're left with a parent, kind of a dumbfounded look on their face as to why did we do that then. Are you telling me they were special Ed and now they aren't so we try to reserve that until last and try to think about it in determining or trying to figure out at which point the child needs prolonged and sustained effort full intervention over time.

Like tier 2, students in tier 3, their progress is monitored weekly and their progress is monitored a little bit differently now with tier 3, once we begin to think that students would be particularly for students who might be in special education. One, the level at which the progress monitoring occurs changes and I'll speak to that a little bit later. Oftentimes for children in children in tier 3 it forking them at their current grade level is just too difficult for them, so we may change the level of the difficulty of the progress monitoring materials and then secondly the progress monitoring is really done more formatively and that is to try to inform assessments so we use it as an assessment tool as a feedback tool that teachers then can change, know when to change, or know when to stay with an intervention that they have going. So it's subtly a little bit different than tier 2 where we just try to see whether or not a child looks like Tier 1 and tier 3 progress monitoring is much more formative and can be for some schools that we work with more diagnostic in nature as well.

And as I noted on the bottom there, when progress monitoring indicates that a student is not meeting or when they are meeting performance standards they would then go from tier 3 back into tier 2 or stay in tier 3 and possibly be eligible for special education. I'm going to quickly look at the question Manager here and see -- Oh, what are some of the universal screening tools in math at the middle school?

Well, we use, um, well let me say, because I know probably the area using the RTI model at middle and high school probably come out. We found most of our success with working at the elementary levels. Having said that, there's certainly products out there that can be used at the middle school. Some of the math probes that have been developed by either companies like imes Web go up into 8th grade, digital learning, um, that's also developed a product that can be used up into that age level as well, and also some of what we referred to as the black line masters but I believe that the monitoring basic skills probe again developed by Doug and Lynn Fukes which are available I believe it's through EGS , but I'd have to check on that, it could be used at that level as well.

What was the Florida group? The Florida Center for Reading Research. It's www.Fcrr.org is a place you can use for resources as well. And I'm going to back out right now for, because the questions are flying in so I'll try to deal with them as We go along.

Those are the basics then of our RTI model. If you were to see it in a nice flow chart this makes sense at times to folks is that all children, we would start in Tier 1, and again Tier 1 is defined as primary prevention that occurs in the general education setting. It's all the nature of the curriculum and the instruction at that time is research supported instruction. All children are screened at least three times a year. The children who are considered or we think might be at risk, their progress is Monday Monitored for sometimes four to eight weeks and if their progress doesn't improve over that time and they are still lower than benchmark, they would move into tier 2 or secondary prevention and again, as I said there's a number of different ways to conceptualize secondary prevention but either way you look at it, children get something in addition to Tier 1, general education support whether it be problem solving or manual or standard protocol, they're getting something in addition to the core curriculum.

Their progress is monitored weekly. If they are responsive they go back to Tier 1. If they are unresponsive or underresponsive I should watch myself there, they would move to tier 3. Again, their progress would be monitored weekly at least weekly. It's oftentimes more formatively than it is in tiers 1 & 2 and the instructional tasks then are usually more individualized or they are more skill specific than what you would see in Tier 2.

So overall in summary if I were just to put, I think I just did it there with that figure though, all students are screened to identify suspected at risk students. We monitor the progress as students that were concerned to be at risk. We provide supplemental standardized interventions to students who are at risk, we monitor their progress weekly. Students who are underresponsive to these secondary preventive efforts are moved to tertiary or Tier 3 where we provide more intensified individualized intervention. If children respond to that, those types of things they can be moved back into tier 2. If they are underresponsive or we suspect they might need prolonged and intensified forms of these specialized techniques, it would oftentimes be the case that they would be considered for special education eligibility, and then even once in tier 3 that their progress would continue to be monitored regardless of if it was special education or not and again the nature of the progress monitoring would change to be more formatively and then at that point as well and we'll talk later on in the presentation that we begin to develop individualized and specific goals for children as they continue on in tier 3 and we'll see how the goals are developed or actually where they're gathered from.

Before I move on though to setting goals and decision-making, I'm wondering Sarah if you want to open up if people want to ask some questions before we move on?

Okay, if you have a question for Dr. Hins, please press Star 7 on your phone. Star 7 will unmute your individual phone line.

I'll go through some of the questions here, Sarah, as I scan through. I've answered some of them. Someone asked about how this all relates to behavior social and emotional mental health. You'll see a very similar, I mean if you looked at the positive behavior intervention support systems, again, those that came out of the University of Oregon And you looked at some of their literature, I think you'll see a large degree of commonality among at least through this tiered program and the way that they conceptualize interventions so there's universal interventions that is the types of things that all children oral students or children in school would get and then

there's individualized and tailored interventions based on the social and emotional needs of children as they work through the model so there's definitely parallels there and again that would be some of the research that's come out of positive behavior support. George Sudai University of Connecticut and Rob Horner University of Oregon would probably be two good people if you want to Google their names and see their materials.

In your model, are there cases when students would November into tier 3 right away as a result of screenings or do they have to go through the tiers laterally? That's a good question. Right now, we are as new to some of the processes as you are, so we have students that we know who are already in special education who were either there or we know have pretty deserving needs, so we might start right now with children in different tiers but over time, it is our goal then, once we probably over three or four, many of our schools are operating in this level is that the only time when perhaps a child might go into not move through the tiers is if they came in from out of district and we would give them some type of survey level assessment and feel that they might need to start at a tier 2 or then obviously if they came in with an IEP and then in tier 3.

So, there is some, you certainly could do that, but our goal is to be able to have all children screened in the matter that we don't have to, that we would go through those processes, that process for most if not all children.

are students monitored at grade level in tier 2? Yes, and we do, at tier 2 we monitor students at grade level, so that we use the, so for example, if a child is, comes out of third grade benchmark screening and we determine that they're at risk, they would be provided with supplemental instruction or in our case the manual and then their progress would be monitored in that same grade material, and the reason that is is because our goal, if you think of from a goal setting strategy, is to get the child back into Tier 1 which would be grade appropriate so that we use that goal, that same grade as for goal setting, and Tier 3 is where we do change it because at that point we acknowledge that some children have some needs that are far below grade level, and it just doesn't make sense to keep our monitoring on their progress at that level because they either don't show much growth because the material is too difficult or the material is so difficult that it's just not sensitive to their growth over time. We'll talk a little bit more about that as we move on.

How do you move students in and out of tier 3 in light of special education rules and Regs? Well, we've pretty much used the same ones. Once a child was in tier 3 under special education, the same would apply as any other student in there under the classification of SLD. We have an annual review at least once a year, they go through a evaluation and they would continue to be benchmarked at least three times a year and that's an important part as well, probably that I didn't make is that regardless of where students are in within the tier, they always get benchmarked at least three times a year, so in essence, children who are in special education with an active IEP, they are benchmarked with those kind of grade level standards at least three times a year, so it's almost better than an annual review. We almost get three reviews within a year to see whether or not a child's making any gains or catching up towards their grade level peers.

I'm trying to see some of the other ones here. Some of these, well some of these advantages or disadvantages, some are about a tier 4 model. One of the advantages as I said before is that you don't create a type one error and assume a child needs special education where perhaps they

didn't would be a main advantage. One of the disadvantages though and I think Doug Fukes has spoke about this is that you end up at what point do you then say that you could, if you went on with more individualized interventions even in tier 3 at what point do you stop and say that this child is in need of special education and it could prolong the process so I think that might be one of the criticisms or perhaps disadvantages of going through a four tier model.

And let me just, one last one before I move on. Someone asked about resources for probes in math, language an reading. I should put the disclaimer that the Center doesn't support any one set of materials. You can use a variety of those. As I said I probably go to the, um, the Centers " Measures" link and see what has been submitted by vendors and evaluated by that team an they've evaluated those with a particular mind set towards would these things be suitable for progress monitoring. We use, in our schools, because of our, most of the schools in our State with Reading First, we use Aimes as our ones for literacy and if the school wants to go into math and spelling as well, we more oftentimes use Aimes Web. But we use both and let me just attack one more.

How would you progress monitor specific behavior issues? That's probably going beyond the scope of the presentation but we used pretty much behavioral assessment approach. We identify behavior at the behavior level, use systematic direct observation or systematic direct observation with a combination of informing report and monitor progress towards goal objectives at that level. And again I think if you went to some of the PBIS materials you could get some help or at least some help in conceptual izeing how you might do that as well.

Is there any questions over the phones, Sarah?

Again, that's Star 7 on your individual line if you want to ask a question over the phone.

How often, can you hear me?

Yup.

How often, I mean, many of these children, I see I'm a school psychologist here in Michigan have multiple issues, multiple concerns. I mean, how many different kinds of targeted interventions are you applying at any one time because a lot of these kids have problems in reading, math, they have problems in writing, attention problems. I mean, how are you, you know, looking at that holistic kind of issue with the child by just looking at specific targeted interventions in one area.

Well, in answer to the question, we wouldn't monitor then just in one area. The RTI model I'm presenting here and that's even when you look at it from the reauthorizations hangs much of it on the classification of learning disabilitys, but having said that , we definitely, we would keep separate interventions, separate goal settings, separate data streams coming in for each one of those basic skill areas if need be. And for us those are the reading, early literacy, math, math call queue can laiingzs, math applications, spelling, and written expression, and then also in behavior as well and as I said we probably rely more on a behavioral assessment approach than some others, but I can't speak for folks nationally.

What we do essentially is we have instructional consultation teams now that are largely using just database decision-making, using a case Management approach, students have binders with graphs in them and they're brought each student has a case Manager that's assigned to bring that case on a regular basis so that people on the team can evaluate the progress towards a year-end or short-term objectives and the like. So, in answer to your question, it would be as many as it would be. Now, I don't want to give you the impression that we're just running around charting behavioral the time and taking data. Certainly we would consider the whole, the child from holistic perspective in that think are other professionals involved in the process as well. It's just not school psychologists and special Ed folks or Title 1 certainly, school counselors or social workers and the like, so they bring their perspective and expertise as well, but for the purpose of monitoring, developing interventions and monitoring the effectiveness of those interventions we'll use a database approach in each of those areas. Fortunately, we have most of the progress monitoring techniques that doesn't take us too long to do those kinds of things. I should also say in behavior we're starting to use a bit of goal attainment scaling to get at those issues as well.

So the child could theoretically be in a tier 2 level of intervention or sort of into that tier 3 before special Ed level and getting special help, 10 minute sort of targeted instruction in spelling, a 10 minute targeted instruction in reading, 10 minute math.

It would depend for each one of these areas if we thought maybe the needs in reading could be met in tier 2 but the needs in math are of the nature that they need to provide, be provided within tier 3, we would always match then the instructional support to the needs of the student with each instructional area.

Okay, and you have a number of professionals to be able to utilize those, that remediation? You have a lot of people that can do that intervention?

Uh-huh, yeah, most of the schools we work with would have obviously our general education teachers, our special education teachers, Title 1 folks, most schools have hired a literacy specialist through their Title 1, through Reading First, and then special Ed folks too, you could use your 15% variance now in providing early intervention so we generally have at least four to five or six people that can be involved in any one of those different levels. The school psychologist would be more involved in behavioral issues but instructionally there's multiple people that can serve in that function.

Okay.

Yup.

Okay?

And 15% variance, is that federal?

Uh-huh, yes.

Oh, okay, so you can use special Ed people 15% of the time with general Ed kids?

You know, that is the case, but I couldn't point you to exactly where it would say that if anyone else could help on the screen there, that would be, yeah, uh-huh.

Okay.

Hello?

Yeah.

Hi. I have a question regarding middle schools intervention for middle school kids.

Uh-huh.

I heard you earlier mention as well as the Wilson Reading Program and when going to the What Works clearing house, both were given kind of less than favorable with regard to reading comprehension, and I have some stuff on the website with regard to middle school math, that they really, we don't have that tier 3, peer review research available that I can find.

right, I understand, yeah. Certainly, in there, when you go to the What Works clearing house, you'll see most of the things on their chart there are really geared towards more early literacy or developing literacy and that many of them have kind of what they use with the dot and question mark and things of that nature in the area of comprehension. I might suggest that you go to the Florida Sent r for Reading Research use the comprehension to look at those for some types of packages that might be useful for you at the middle school. I'd be honest with you, I'm hard pressed to think of one off the top of my head in the area of math that we use corrective math in some of our schools but I don't know if that goes up to eighth grade, but I'm not quite positive of that.

The other thing too is that oftentimes people say well how do you implement this in the middle school or high school and quite honestly we're not right now. Most of our middle schools, that's not to say, I don't want to say it as a cop out, but it's very hard, if you're thinking about specifically like specific learning disabilities, it could be a challenge to use some of the screening, some of the processes in the eligibility processing probably use more for traditional. Over time though, what we hope is that over a 10 year period or time or so is that we will have identified children earlier on and gotten to their needs much earlier on so that with their identification in elementary school and we've already begun to program the other kinds of supports they need in middle an high school so we wouldn't be using initial eligibility through an RTI model.

I will say think are people around the country doing work at the high school particularly with the assessments and Chris Espen and her colleagues at University of Minnesota might be good folks to contact about that. Their websites, www.RIPM.Com or might be org. Todd Bush also who is a graduate in Minnesota has developed vocabulary measures that have been demonstrated to be useful at the middle and high school as well.

For upper level children and reading, we've used comprehension, or another technique which a colleague of mine here at the University has developed is called sentence varification and we've found that to be helpful as well. So, all right?

Where can we find the sentence varification?

You would have, um, that would be Mike, well this isn't good. He just retired but his name is Mike Royer, but he's one of those guys whose birth name was James or Mike, so you can either try James or Mike Royer and I think either way you'll get to him. I don't know if his website is still active at the University of Massachusetts. He just retired last year but I think even if googled sentence varification technique, it's not something you can buy or purchase but what you'd find is the instructions and directions for actually developing some of those measures yourself. And we've actually used those in research and have found that the SVT in combination with the Maze procedure, which is pretty typical of most CBM approaches provides for comprehension is feeling that the maze taps into syntax features of comprehension and that the SVT gets at more kind of underlying or semantic features of comprehension.

Okay, thank you.

Yup, you're welcome.

I think I'll move on just because I know we don't have too much time today, but I wanted to move then to our discussion of then how do we set goals and then make decisions on I've talked about benchmarking, I've talked about monitoring the progress of students weekly or twice a week if need be. Once we have data and we go out and get these data on children, how do we then make decisions about responsiveness to intervention and who should move from Tier 1 to tier 2 or from Tier 1 back to tier 2 and tier 2 to tier 3 and so on and so fourth.

As I said noted earlier, all students in Tier 1 are considered to be in primary prevention. We use CBM, we find that it's probably the thing that's best designed to meet the multiple uses that we need in an RTI model. One of the things I might say is that as you think about the types of assessments that you might want to use, an important thing is if you're going to use an assessment for tier 2 or tier 3, one of the things you want to make sure is that the assessment comes in enough formings, enough multiple fovrms you can monitor progress over time. Not all things do. Some of them are designed to be used as a pre-test post-test assessment and perhaps might lend themselves to benchmarking but then wouldn't be able to be used in tier 2 and tier 3.

I would encourage you not to mix an match assessments to different tiers so for example, I wouldn't suggest that you might use one test because it comes in two or three forms for Tier 1 but then when students get into two 2 or tier 3, you would you be using a different one an choose an assessment that you can use come pre hence everly to serve both purposes of benchmarking and progress monitoring and most of those commercially available CBM packages do that for you.

All students in Tier 1 are screened three times a year and those students scoring below benchmark may be considered at risk for reading or math difficulties. For those children, we monitor the progress for some time in order to confirm or disconfirm their risk status.

The way that we do this, this is just a screen shot of a chart that is available from Ames Web or Information.Com, if you clicked under the " Measures" link, and then scrolled down to reading, you would maybe find a chart that looks like this and basically this is one of the kinds of things that we use for our decisions at Tier 1.

What you'll see on this chart, importantly, is that the scores or kind of benchmarks as we call them are presented seasonally. You can see there, it's in the Fall and of your screen is like mine, it's a little small but if we looked in the Fall, it looks like in second grade, children who are at the 50th percentile or reading, I can't tell you, is it 39 words correct per minute or something like that, but what you can see here is that it provides you the reading levels that are associated within each percentile rank at that grade, so here is what the average child in first grade is reading in the Fall of first grade.

Here is how many words correct per minute a child is reading in second grade who happens to be at the 25th percentile, and here, for example, is how many words correct from a child is reading in third grade in the Fall who happens to be at the tenth percentile and then as you can also see, these benchmarks, oops! They aren't changing. Oh, there they go.

We have different benchmarks for different times of the year, so there are benchmarks for Fall and winter and spring. The other thing if you have some interest if you haven't looked at numbers like this before, it's kind of interesting because you can see as you go across a grade level or from 50th percentile in any one of these grade levels you can see the average performing children at the 50th percentile, their oral reading fluency increases over the period of the year and that you can also see if you want to cross-grade, that their oral reading fluency improves as well.

For the purposes of screening, we use the 25th percentile as representing those children who might be at risk, and the reason that we use, there's two approaches to thinking about who or who is not at risk. The two most common is either the 25th percentile which cuts off basically the lower quartile of children or children who are one standard deviation from the mean, and those children would be at the 16th percentile. Our feeling is we would rather use a 25th percentile and perhaps maybe identify a child or two that really belongs in Tier 1 or really is doing okay, because we'll figure out that with later assessment or they will respond quite quickly to tier 2 intervention. If we use the 16th percentile and we have a child who is at maybe the 20th percentile and really struggling and really needs help, we would miss that child because their score would be above that 16th percentile, so it's a case of kind of picking your poison and having to go with either one.

Our feeling is that using the 20th percentile and perhaps making some false positives out weighs or false negatives out weighs the potential problems associated with missing children who otherwise might need help.

At the end, then those children would be monitored for four to eight weeks as I said before and we would monitor the progress. This would be an example of someone whose progress was monitored during that time period and her name is Ann and as you can see, right after benchmarks she was doing about let's say five or seven digits correct per minute if we look at the first two data points and at the end of that assessment period and this is again at about eight weeks, she was doing up at around it says like 15-14 digits correct per three minutes. That line as you see right here is called our line of best fit, and that's our trend line and what that line does is summarizes those data points in the best manner. It minimizes kind of the difference between any one of these data points in this line. That's why it's called the line of best fit. And slope, what we call this is a slope or ROI, rate of improvement as indicated by one.

And that means, what that means is that on average from one week to the next, and again this is on average, from one week to the next, Ann improves about one digit correct per three minutes, okay? So, now, the question then is, is Ann at risk? Okay? And so I would like you to log on, take a moment if you need to go back to the previous, Oh! We got a quick one in there, two people very quickly, is Ann at risk? And now you can't help back there. I just heard someone help back there saying " Say no".

So remember this is Ann now coming through our benchmark screening of being a little bit below. We want to monitor her progress for some time and we haven't given the intervention or the information provided right now. Is Ann at risk? What do you think? How many do we got? 179 people, so it looks like, all right --

She's not at risk. She's improving.

I don't think everyone is muted, Sarah.

Looks like we're getting pretty close to having all votes in. We got to lock them in like the Power of 10. I'm going to close the polls now. Did I just close it? Oh, there. Close, the polls are closed. And now, and here, are the results. Do they see the results, Sarah, are you on?

Yes, they should see the results.

Okay, because I don't know that they saw previously what I saw. As you can see about 12 or 11% of you said yes, Ann is at risk, about 72% or 75% said that no, and about 16 or 15% of you said you don't know. Well, I would probably say, although if you were using, if you remembered the table prior that no, one of the things that I think we probably say is we don't know because we don't know what Ann's rate of improvement should have been. We know that she was growing at about a word correct per minute. We can see from this table that on the far right is what we would call our rate of improvement. Now, Ann is a second grade student and we didn't know that.

A second grade student and we would expect, I think that says about .3, right? We would expect her to be growing about a third a digit correct per week from one point to the next, okay? So, with Ann now growing at about a digit correct, is she lower than, equal to or greater than students in her grade? Well, the answer is she's greater than, but recall back to one of those

earlier slides where I said where we operationalize at risk from a dual discrepancy approach meaning that she would have to be both at risk with respect to where she's at, her rate of growth but also in respect to now some kind of benchmark status.

Recall that in the Fall when we first looked at Ann, I think that's at about 10 or so, she was below that number, so that's what put her at least into our monitoring cycle. Now, but consider now that that was in the Fall and this is nine weeks later because we monitored her progress for nine weeks, this would probably be a better estimate. She's approaching probably the Fall benchmarking period, and we would probably use this as our benchmark, so in answer to our question, we would probably want to keep an eye on Ann To see if she catches up and the reason I say that is she is obviously growing much faster than typical children at the 50th percentile who only grow about a third of a digit a week. She's nearly tripling that and as we see, over time she's coming close to approaching the benchmark. In fact it's not quite the Winter benchmarking period for her so we would want to continue to monitor her and then see at the next benchmark if in fact she still looked like she was at risk. So, Ann is an interesting case. Because we would still want to kind of monitor her for some time.

Here is another case. Here is Arthur. As you can see, he scored again below benchmark during the benchmarking time. His progress was monitored for eight weeks and Arthur's slope of improvement now is 0 meaning he's growing at 0 words correct per week so again, why don't you login and vote for, is Arthur at risk? Well the votes are piling in.

Folks from South Florida are waiting for Kathleen Harris to make sure they approve of them voting this way. And got about 108 people that voted so here we go.

There's another 10 seconds or so. And I'm going to close the poll, and you can see that overwhelmingly, you said that yes, Arthur would be at still at risk. And that's probably a safe assumption knowing that at a benchmark, he indeed was at the benchmark assessment, he was below benchmark. He did not make improvements during that eight week time. His slope was at 0.0, it's lower than the 0.3 we would expect and again we know now Arthur is probably somewhere in between benchmarking periods but he would still be below the fall one so he's obviously still below the Winter one. Arthur would be, Arthur is, oops! Arthur is not responding to the core curriculum and should be moved into tier 2, so hopefully what you can see through that is that how we use data, how we use data that is based on the core curriculum or the general education population to make determinations as to how children are moving in and out of Tier 1 or perhaps even into tier 2.

So, again, in review, all students in Tier 1 are screened to identify suspected at risk status, students suspected to be at risk are monitored for some time, students with adequate slopes remain in primary prevention and adequate slopes and/approaching at benchmark remain in primary prevention and then those students with whose slopes are lower than their general education counterparts, they are continuing to be below benchmark, then would be considered for tier 2 and one of the important things that I probably should say if I move back up, recall that when I talked about identifying risk status for children in Tier 1, we said below the 25th percentile but now when we're talking about average growth is we're looking at what a typical child does and how do they respond so we're using growth estimates that correspond to the 50st

percentile and not the 25th percentile because ultimately we want to have students look like other students or perform and respond like other students at the 50th percentile in general education.

Moving on then to tier 2. We use the same goal setting strategies and decision-making as we would use in Tier 1, or as determining as to whether or not children are at risk at Tier 1. In addition to the core curriculum children who are now in tier 2 receive supplemental manual intervention for a period of anywhere from 10-15 weeks as I noted earlier and then at the end of that 2 intervention, depending on when you start with your intervention, it might be in between benchmarking periods, but it's usually our preference to try to wait until a benchmarking time to make some type of formal evaluation as to student progress because it's at that point we can kind of reference the students progress back to students in the general education setting.

Students who are at or above benchmark return to Tier 1 and that would mean just the general education curriculum. Students who are below benchmark but making adequate or exceeding growth progress maybe maintained in tier 2 and this says that a child is responding to what's going on in tier 2 but perhaps it hasn't been enough time for them to make all the growth that they need to do to look like children who were back in Tier 1. Sometimes people have asked me, well what happens to a child when they, if they appear responsive in tier 2, they go back up into Tier 1 and they're having difficulties and they come back into tier 2, do you allow a child to bounce around back and fourth like that? We don't. We might have the child move back in between Tier 1 and tier 2 once or twice, but we might come to the determination that we have a child whose needs aren't of a special education nature but whose needs require both the core curriculum and some type of supplemental intervention in order to be, to maintain or make adequate progress and they would kind of stay within that tier 2 for an extended time and then obviously students below benchmark and continuing to demonstrate poor growth would move into tier 3 as we noted before.

In tier 3, the difference now instructionally is that we would use more intensified or individualized programs and again as I said, it's our preference to try those types of things first outside of the space of special education to see if there's specific learning needs or gaps we can fill in and then get them back into tier 2 and then for students who are indeed classified, they would receive special education services and also have an IEP that would be developed as well.

Once children get to tier 3, I'm going to move along a little quicker now because I know that our time is drawing to kind of close to the end, once children are moved into tier 3, we now are not going to use the goals that we used in Tier 1 and tier 2 that reference the general education population. At this point, we would acknowledge that a child is struggling, that their rate of learning and the trajectory of growth does not approximate children in at least the 50th percentile in general education setting, and that we're going to need to come up with a goal that does two things. One, that sets a target for expected progress for that student and the teacher and then secondly allows us to evaluate whether or not our intervention efforts in tier 3 are successful.

We have three basic approaches or ways to do that. We can use aggregated benchmark estimates and they are basically the ones that we've seen before and I'll show you kind of how we use those to determine a rate of progress. We have aggregated rate of improvement or growth estimates and those are kind of like those ROI's that I talked about before, and then for some children who

either the first or second approach isn't suitable we'll use what's called an intraindividual framework and I'll show you how that goes in a moment.

For the aggregated benchmark estimates it's pretty straightforward. We identify the appropriate grade level benchmark that we would like to see a child meet within a year's time or at the end of a given year. Now, here is where we need to do, sometimes we do a survey level assessment but earlier on someone asked in the question window, do you always monitor at the grade level in which the child is currently at? And for Tier 1 and tier 2 yes that would be the case. In tier 3 though we acknowledge some children might be exhibiting some pretty significant difficulties and it wouldn't make sense, for example, to keep on monitoring a fourth grade student with fourth grade reading materials knowing full well that he's not responding. He has difficulty reading those and that they aren't going to be sensitive to growth. We might then decide for that student to monitor his progress in second grade materials, and I can't go into how we do that right now, but we use a process called a survey level assessment that moves down the curriculum and attempts to determine at which level we think that the student would be best progress monitored.

So we identify the appropriate grade level benchmark and say for this example, it's a fourth grader who will monitor second grade. We monitor the benchmark on a student's graph with an X corresponding to the end of the year or whichever point we come back and make evaluation as to whether or not the child is responsive to the intervention, and then simply draw a goal line from the baseline scores to the CBM scores, and to sort of walk you through that in this example, we have a third grade student in math, and we can see in the Spring, can't see that but at the Spring, we would like to see them be at some level of proficiency, and it looks like it will be 20 something digits correct per minute, it's really small on my screen.

Notice also, again, that in this case, now this case, this child we're saying third grade, he might be in fourth or first grade but we've determined that his skill level or the level at which we're going to progress monitor him is most appropriate at third grade. Notice again that we're referencing the child's performance to the 50th percentile meaning that we would like to see him look like typical children in third grade which would be the 50th percentile in the Spring.

Then we would simply identify where the student was at benchmark and you can see it's digits correct on the left we're monitoring his progress in math, place an X and kind of where he was in the middle of benchmark, identify where we would like to be, for him to be at the end of the year and in this graph you can see from where we are now, at benchmark to baseline to the end of the year is only 14 weeks, so this is probably some time in March or so. This would be up to 36 weeks if it was a whole school year. The only reason we've shortened it here so it all fits on one slide.

Once you've done that is connect those two points and then this goal line serves as the reference for making decisions as data are collected on a weekly basis and we'll talk about how you do that in a moment or two. Notice also that this is dynamic in the sense and the fact that goal changes from one week to the next. If any of you are familiar with CBM or CBA, kind of in the old days you might have seen a line like this where you wanted him to be at the end of the year, a

horizontal line. Well, for a child way back at the beginning of the year, there's a pretty big discrepancy to what they can do.

What this shows, this dynamic line shows how the goal changes from one week to the next and then again as I said we'll make decisions on the basis of that in a moment. The other way, so that's using just commonly the performance standards or the benchmarks if you will. The other way is to use rate of improvement standards and then in this chart here, you can see on the far right hand corner or far right hand column, this column is ROI, and that's rate of improvement and in this case, you can see that the average children in 4th grade, and I can't see is that 0.9 or something? That typical children, it's 0.5, are growing on average from one week to the next about half a digit and you ask what's half a digit and what it means is that over a four week period they're going to be expected to grow about two digits correct per unit time during that time, and again, as I said you can see here that that's again referenced to that 50th percentile.

Using these rate of improvement standards, the way that we determine a students end goal, we use just kind of a little formula and the first part of the formula is relatively straightforward because we've already done it. We've established what the students performance levels are at baseline and in this case, it's about 14. And the second step, we identify what is expected for average 4th graders across the year and we've already determined that average 4th graders grow at about a half a digit correct per week in 4th grade.

We multiply the norm by the number of weeks left in the school year, so in this case, we have 16 weeks left in the school year and we multiply 16 by .5, remember that's the expected growth of digits per week and we're going to get our product of eight. We then add that product to our baseline and we're going to get our goal at the end of 16 weeks of 22, so that the students end of the year goal is now 22 and much like we did before, we're just going to draw an X out at the end of the year where 22 is, connect the two points and we'll see that as our goal line.

Dr. Hins?

Yes.

Can I interrupt for just a minute. If you unmuted your line to ask a question, can you please do it again by pressing Star 6 on your phone?

Who me or everyone else?

Just other people.

Oh, okay, yeah.

So if you could push Star 6 so you could minimize the noise for the recording.

We have about 10 minutes left.

Okay, yup.

And then the last approach is called an intraindividual framework, and I should say that either one of the first two approaches is suitable for most purposes. This last approach though for some children, we know that using either the rate of improvement or the benchmark standard might be just too high for them, and what happens then is you come, you could come to the conclusion because their data points continue to fall below the goal line, that they aren't responding or that they are making inadequate progress over time. The result of that or what can happen in those instances is that you might come to the conclusion then that the intervention is not working and we need to change it, and when in fact the intervention perhaps might be working, so for children who either the first two approaches aren't suitable or for those children whose growth is substantially lower than either the ROI or using the benchmark, but are growing over some period of time, we would like to use their own growth over some period of time to estimate where we would like to set a goal over time and that's why we call it the intraindividual approach and basically what this is is that we make sure that we have at least eight data points that are collected for the student, okay? And we take those eight data points and we're going to multiply the slope by 1.5.

Now I should say that the slope, you could get this from an Excell spreadsheet or if using any one of the commercially available products and their software that goes along with those things these are the kind of numbers that come out right for you. But what that slope refers to is previously I said Ann had a slope of 1.0 or those rate of improvements we saw on the right hand column, we'll multiply that by .5. Well, that's a constant and we're always going to multiply it by 1.5 and what that does in essence, it says okay, you've shown this amount of growth over the last eight weeks. We'll ask you to at least, we're going to ask you to not only, we're going to ask you to exceed that level of growth by a factor of about a half, and in doing so what we know, if we set that and research has shown that that's setting an ambitious and probably attainable goal is that we will influence learning both, we'll influence teacher decision-making with respect to instruction and also responsiveness to the student, but it sets an ambitious goal.

Once we have that product, we multiply the number of weeks left to the end of the school year like we did before. We add that to the students baseline score and this is the end, our end year goal and again, what that would look like in this case is here is a student with a slope of improvement over this period of eight weeks is about .63 digits correct per minute, we're going to multiply that then by 1.5 as we saw here, and that gives us a product of 0.94 about. We're going to multiply that by 12 and 12 is the number of years left or weeks left in the school year, we're going to get a product of 11.25. We add that to where they started which is about 12 digits correct per minute and that's going to give us an end of the year goal of 23.25 or about 23 for the students end of the year goal.

And again, what that would look like then is something like this. Interestingly we can see with this case and we'll talk about in just a moment is this student if we were to predict it looks like they might exceed their goal and in which case, we'll want to rethink about how we set that goal.

Those are the three most common approaches to setting goals. Once we have our data then and we developed a goal and as data comes in we want to make decisions on the basis of those data.

The three most common approaches are either using a visual analysis approach and analysis is a trend I'll talk about or if I have time at the end talk about simple test of significance to do that.

In a visual analysis, it's simply looking at the data and judging for yourself as to whether or not you seem to think that there's sufficient progress being made. The nice thing about visual analysis is that it's easily done. Most people can look at a graph and make some impressions about whether or not the child is growing or not. Even some of the applied behavior analysis literature would suggest the visual analysis when it's obvious changes in the data, yield pretty reliable results. One of the problems though that they are hinged upon is baseline logic and this can be sometimes an impediment, so it's probably the easiest form of making decisions and I can tell you in most instances with the children that we're working within either of the tiers, the changes aren't that obvious we would want to rest our decision solely on visual analysis.

In your analysis trend, there's a walk through in a moment, one of the things we know is that with sufficient data, we're able to make good reliable decisions. The more data we have the better decisions that we make, and that we can minimize problems in our decision-making by minimizing variability and data and really what I mean there is by developing, using good assessment techniques and materials to minimize kind of the error in our measurement.

In analyzing or making decisions and using analysis to trend, there's two common techniques. The first one we refer to is the four point decision rule and not surprisingly it's based on the four most recent data points, and the second is what we call as one based on an analysis of student trend over data and really walk through first the four point rule and we'll go to the decisions made on the basis of trend.

In the four point rule, any time we have when the most four most recent data points are consistently above the goal line and actually in this case we have five, we actually improve our decision-making, any time we see that, we then make some kind of decision. What should we do then in this situation if you want to vote real quick, where all four data points are above the goal line? And for some of you depending on the way that your screen resolution, you might have truncated the red is keep the goal and intervention, blue is keep the goal and change the intervention and yellow is raise the goal and keep the intervention. Okay? Another moment or so here. And I see a pretty clear trend developing here, so I'm going to close the poll and show the results and as you can see, yes, most of you are pretty consistent here. 88% of you said raise the goal and keep the intervention, and, well, in fact that is probably the best thing to do. If all four data points are above the goal line keep the current intervention. Whatever you're doing is working an increase the goal and that's an important thing because one of the things we know is that it's a dynamic process and by choosing a nice goal that's within a student's kind of zone of proximal development if you want to think of it that way is that we can actually enhance student performance by choosing good goals and altering the goals on the basis of their performance at that point in time.

Here is the four point rule again, now, where we have the four most recent data points are below the goal line as we can see in this case and if you want to quickly again vote, what should we do in cases in which all four, the four most data points are below the goal? And I can see our data is coming in. Actually, you can see it too. I didn't think you were seeing it as it was coming in.

Give it another minute. I think we see a pretty clear trend here. And 98% of you have said keep the goal and change the intervention and in fact, that would be the most prudent thing to do. We never want to lower a goal or lower an expectation for a student and/or a teacher in this case, but the most, the thing that would make most sense in this situation would be yes, is to keep the goal and modify instruction.

Then lastly when the four most recent data points are neither above the goal line or below the goal line, we want to maintain the current goal and instruction and continue the progress monitor. If we see a trend where we don't see any consistency above that where the data is coming above or below the goal line, I think that I just moved up. We would then want to use, um, a different type of decision-making paradigm and use one based on analysis of trend and we can see here and it is an example where we have data in which there's no consistency among the data points, the last four either above or below the line. If we have at least eight data points or it could be more and we don't have a pattern yet, we wanted to make our decision on the basis of trend and what we want to do here is fit a line best fit through those eight data points as we've done here and then compare the trend line to the goal line.

I'm sorry. When the trend line is steeper or accelerating relative to the goal line, then we want to keep the current intervention and increase the goal as we did previously when all four data points were above consistently above the goal line.

Here is an example where you have the trend line is below the aim line and probably is no surprise to you, is that when the trend line is lower or decelerating relative to the goal line we want to keep the current goal and modify instruction as we did before when the four data points were below the line.

And then lastly, when the trend line, if we have a case in which there's no discernible difference between the trend line and the goal line, then we want to keep maintaining the current goal of instruction and continue to progress monitor.

I'm just going to show you this one for those who are interested or have to for whatever reason do a hypothesis test for slope, if you had a slope and in this example and again you could get these numbers from Excell in this case the slope is 1.71 and if you were able to get the associated standard error of measurement that went along with that we could do a simple T-test by dividing the slope by its associated standard error of measurement which in this case equals 4.9 and if we went to a T-table and looked up the T value associated with 6 degrees of freedom, it's because we have eight data points and the degrees of freedom are the data points minus two, our T to B so to speak would be 1.94. Our T is higher and we would determine that there would be significant growth over time for that child.

So I know I had to kind of go quick at the end, but let me see first if there's, um, questions that we can entertain here or if you want to open the lines up, Sarah, if people have questions that they want to ask on the phone as well?

We'll just take maybe one or two questions, because we are kind of at the end of our allotted time, but if you have a question, you can press Star 7.

Some of these questions I already answered up here.

Hello?

Yeah, hello.

Yes. My question had to do with the universal tool in for the beginning grades Kand 1.

Uh-huh.

Do you have one efficient, quick measure that research is showing definitively is worth investing in as opposed to a few that might be more discouraging than time investment?

Well if you take out definitively from your question, I would probably, it was a bit loaded but I can't say definitively but we've relied on many of the early, in the area of reading or literacy we've relied a lot on the measures from Dibbles and then Aimes Web. In some instances we have used some of the measures developed by the University of Minnesota called IGDES which are developed for pre-K if you will but we don't use those in all situations, but you could get those or at least look at these measures again if you probably googled individual growth dynamic indicators, IGDES, they're out of the University of Minnesota. We've also used vocabulary measures that dynamic indicators of verbal vocabulary skills that have been developed by a colleague here in Massachusetts, so in answer to the question, we don't use just one. It's usually at those areas where we're screening for a couple different things and the reason being is generally speaking, we talk about dynamic indicators, there's usually a number of key developmental behaviors or skills that are going on at that point in time and we haven't found any one in particular that serves the purposes or serves as a dynamic indicator for all of those important skills that reside underneath.

Can I press, let's say phoneme segmentation and nonsense words, would you say that's comprehensive enough those two to give you a good picture of kindergarten student that might be at risk?

I think that it would be something that we would feel comfortable, again, well in answer to your question, would it depend on what tier in the model we are in. I would say that we would feel comfortable as using those for screeners and if you look at the screening literature, what you know is that in screening what you're trying to do is identify those children who are initially at risk. I would not feel comfortable in using just those alone for making any kind of diagnostic impressions so for screening yes but if you're talking about classification or saying this child definitely has an awareness problem or that, no, the answer would be no, but it would depend what tier in the model the child was at and what our assessment question was.

Thank you.

Yeah, you're welcome.

Any other questions?

This question here, would be the best bet to screen all students first then put the interventions in place? I think, yes, that that's probably the best bet is to start screening and then sorting children according to their intervention needs and what you have, have, so input the intervention, if you think of the core curriculum as being an intervention, and I kind of like to think of it that way, you can think of it as an inoculation with literacy, that would be the case where you want to put the intervention in place first and monitor later but I think as a general rule, yes, you'd want to screen first and then put children into intervention. Second, in monitor the responsiveness to the interventions and then adjust accordingly.

Can tier 3 interventions be utilized in an after school program? I see no reason why they couldn't be as long as I think they had some scientific basis or evidence behind them that they are worthwhile and useful. And are interventions in Tier 1 level given to students being monitored at Tier 1? Are classroom teachers provided additional instruction during this time? Not quite sure.

Well, Tier 1 is the core curriculum and so all students are getting that in classroom teachers aren't being provided additional instructional time per se, but they're being provided the instructional time that would have been decided along with the core curriculum, and I'm not sure if I answered that but I don't know if I understand the question exactly.

Is it appropriate to use standardized test scores in benchmark, to benchmark students? Again, as I think I noted earlier, it would be most important. Whatever you use to benchmark students is that it comes in multiple forms so that you would be able to use it in tier 2 and tier 3 if need be, so that you can compare children over time and then cross tiers as they move back and fourth. I will say also that CBM is a standardized assessment technique and so it would fit that Bill but again I'd say most important thing is that you're able to compare apples and apples across time and across tiers would be the most important thing.

Are the reading progress monitoring probes administered exactly the same way as the benchmark probes? That's a good question, including administering three probes, well, no, that's a good question. I didn't make that explicit. In benchmarking, yes, we do use three probes and take the median and what we found in using that process and actually some of my research would suggest that in doing so, we get a nice, reliable estimate. When we monitor progress over time as we would do in tier 2 or tier 3 or even in Tier 1 in trying to determine whether a child is at risk or not, we typically administer just one probe rather than three and take the median. You certainly could do three and take the median. It adds or triples your assessment time but I see no reason why you couldn't do that. What we do know again is with sufficient number of data points collected in tier 2 or tier 3, or weekly progress monitoring you get reliable estimation, you're able to make, get reliable estimation and make good decisions.

Just a couple more up here, Sarah if I could see. Could you repeat the process with the hypothesis test on the last slide? I don't know if I can get back to the last slide, so without closing this out so what you want to do is Oh, um, get the slope that corresponds to your data points. Also get its corresponding standard error of measurement and you could do that through Excell. Divide the slope by the standard error of measurement and you'll get a value, compare

that value to a T-table value which is the number of data points minus two, and if you looked on the T-table, I think in that example it was eight data points and so we would look at the T-value for six data points that corresponded to the .05 level and if you look in the columns of the T-table, it's .01, things like that, whatever that value is that corresponds to the degrees of freedom and your alpha level is the T-value that you need to beat in order to be significant and in this case I think it was 1 point something, our T-value we calculated using our slope data was 4.something and in that case it beat the T- value so it was significant.

And do you know anything about NWEA and map testing and does it fit into this model?

I know a little bit about that and it probably fits into a probably better thought of as a benchmarking approach, and if you wanted to think of it that way as a benchmarking screening I would see no problems with that. I think where you would become a challenge for you perhaps is when students were in either tier T2 or tier 3 and being able to monitor them on a more frequent basis, once a week or more than once a week. Some districts or schools we work within Massachusetts Do do map testing three time assist year or twice a year, and in addition to their benchmark assessments that occur during the year. So, Oh, another presenter is still looking at a question, and then are there resources to get benchmarks for ELL populations? This question must come from Minnesota.

I don't know of any in particular but I might contact some folks either if like at Minneapolis school district, to see if they have benchmarks that correspond to subgroups such as the one you mentioned here.

But off hand I don't know, and I apologize for that. An I think that handles all of the questions, Sarah, so I'll turn it over to you.

Well, thank you very much, doctor Hins.

Yup.

For sharing your presentation today on student progress monitoring and response to intervention. We hope you Allen joyeded todays event and you'll plan to join us for our next webinar. I believe we're planning it for November, the date is not set yet but we'll keep you apprized of the details through e-mail and via our website. If you'd like to print a copy of the PowerPoint slides from todays presentation, you can do so by clicking on file and then print to PDF. The slides and recording will be available on the website probably by the end of this week.

We would appreciate your feedback about today's session. Please take a few minutes to complete the webinar evaluation that you see on the screen. We value your feedback and ultimately your suggestions will assist us in making decisions for future webinars.

Once again, thank you for participating today. We hope you found this experience to be worth while and we look forward to meeting you online again soon.