DR. DON DESHLER: I'd like to set the stage for what I would like to have us do. We have about an hour and fifteen minutes or so together to travel a few miles here. And I just want to position, and I may – I probably didn't make this point clearly, and I may have confused some when I said, just the way we're looking at RtI, RtII, for adolescents is if we have reasonably strong evidence that these kids are indeed significantly behind, we want to get the emphasis going on those intensive underlying foundational skills as quickly as we can. We don't want to take a semester and have them go through a typical, you know, Tier 1 intervention and, you know, you flush a big chunk of time down the drain when they should be getting intensive. Now, with that said, while they are in some kind of intensive reading class or math class, at the same time – and we recommend that that come out of a study hall or an elective, which gets sort of nasty, I know all that, but the cores need to be there – but at the same time they are in core classes. And that's why we're spending the time going over these routines that we're talking about here, is so that the kids when they are in the core classes they don't have – theoretically the don't have the skills and strategies that we are providing them intensive instruction on in their supplemental classes. But, in the meantime, when they are in the content classes these kinds of procedures here hopefully are allowing them to get the critical content in spite of their lack of skills. Now, someone made the mention at break-time, you know, that we use stuff like this and my response was, hey, we've never claimed to have an original idea. Stuff just gets to Kansas a little slower than it -- but, I would say this - if there is one thing that I would want to convey to you it is this. And, I'm going to go through one other content-enhancement routine and I interjected this at break-time. These aren't just graphics. They are not just graphic organizers, because there's a boatload of these in the literature. What – in the research that we've done, and I'm going to show you some data in just a bit, a graphic alone generally doesn't do it. If you remember, on the unit organizer, the line labels connecting the bubbles – in the absence of that we just weren't getting the kind of bump with the lower-achieving kids, so what we brought there was a critical language component. The other thing that we find to be important in this is the scaffolded learning where we're engaging the kids and not just giving this to them so they can take it in a passive way – really getting them engaged, and then we'll stand back from them after we fill this up and have them work with the content, in small groups or extended writing assignments, or whatever. Again, that writing to read report from Steve Graham that I mentioned earlier this morning. It is really using these as sort of an arena within which a lot of learning and practice with learning takes place, and not just a pretty little graphic, fill it up and forget it. But, work is done with these around them.

So, I wanted show you, add this one, it's a comparison routine, we call it, and by the way – and each of these, the first one, the unit – we call it the unit organizer <u>routine</u>. Then, it was the concept mastery, that was the Civil War, concept mastery <u>routine</u>. This is the concept comparison <u>routine</u>. Now, the reason I'm emphasizing <u>routine</u> is the way in which these are incorporated in a routinized way within a class on an ongoing basis. In just a little bit I am going to come to the instructional methodology – well, I'm going to tell you right now. The instructional methodology that is used with these is a three-step – it sounds simple, but there's some involvement especially – well, with each step. The first is "cue", so it's cue step one, "do" step two, "review" is step three. Cue, do, review. Now – and that's sort of the large framework for the routine. And I say routine because we are wanting to use these on somewhat of a consistent basis over time so the kids get into this routine and they can see, you're making explicit learning, and the acquisition of knowledge and information – because they don't have

this and even the high-achieving kids often don't have it. They get the big answers because they've got some extra grey cells. Okay? But they get onto Duke or Cornell where the pyramid narrows – if they've not learned how to learn they're going to be at the bottom of the heap. All right. So that's what we're wanting to do is make the learning process explicit to them, the routine. So, cue, what we'll do when we're going to be using one of these graphics, we'll put it up, and then let's assume that they've seen the comparison table before and they've used it before. All right? Because it's slightly different if they are not and we're just introducing this the first time. We'll assume they've seen it and have used it before. So, we'll put it up there or I might say, hey, today we're going to comparing the – or taking a look at what was happening in the North and what was happening in the South relative to some social trends. We're going to use a device to help us organize the thinking. What do you think it might be? Now, that can be a cue. Or, if I'm using an overhead projector or one of these things, I'll flop it up there and say: Ta-da! What are we going to be doing today? Okay, in other words, we're saying – and I make this explicit – when I cue you to something that means this is important stuff. When I was going through basic training in the Army they didn't want you to fail because they kept saying – now this was back in the Civil War days; no, not quite – but they said if you fail it's going to cost taxpayers \$18,000 to recycle you, so it's probably \$180,000 today to recycle them, but, so they wanted to make certain. So, you'd be in a class and they would take the, they don't have it, they'd take a yardstick and he'd say: "Now when you hear this," and he'd pound it three times on then floor, "the information that's going to follow that is really important," so you'd be sitting in class – boom, boom, boom – boy, you'd sit up and listen because you listened – that was a cue that would follow on the test. So, we're not quite that obvious here, but we're telling kids: Hey, we're going to give you a cue and the things that follow, this is critical but difficult information. And my role as a teacher is to mediate and really try to make you, help you understand this. Okay, so, we give a little cue. Then the "do" part is filling this up. It's filling in the parts with them, and to the degree that we can we engage the kids in asking leading questions and so forth, and I'm going to show you a little bit of that when we do the comparison routine here. And then, after we get it filled up, then we go into the review. It need not - it may not be the same day and it may take a couple of days to fill one of these up because you're teaching the material, right? But, during the review part of the routine there are two parts that we are reviewing. (1) Well, what would you think we're reviewing? One of the things would be what? The content – absolutely. And, we can review that in a variety of ways. You can put a partially filled on up there. You can have the kids talk to one another. I mean, you can make up a boatload of ways in which they manipulate, work with, transform this information. That's the name of the game, that they see it in a variety of ways. That's how it gets internalized. Okay, reviewing the contents is one thing. What's the second thing we're going to have them review?

AUDIENCE MEMBER: Strategies?

DR. DON DESHLER: Yes. The strategies or this thing. How did it work? Make the case to me that this thing worked. That it paid dividends for you. Convince me that I should use it again next time we need to make – we're going to be comparing things. Make the case to me. Okay. In other words, we have kids talk about how this helps them as a learner and why it helps them. Again, we want them looking at this sort of how – what are some smart things learners can do. Okay. So, that's the instructional methodology and we do that in a routinized way to make it explicit.

So, let's go through this. This one is going to fill up and give you a thrill too. Now, what do we do – what is perhaps the most common thing we use to compare things. Venn diagram, right? Okay, now, this is a Venn diagram on steroids. Okay. It has everything that a Venn has, but it does things explicitly that Venn doesn't. Okay, and you see where this will help kids. Now I'm going to – let me see how this is put together. Okay, one of the – so, you can see what we're comparing here is the economic conditions in the North and economic conditions in the South. Those are the two comparisons, those would be our two circles, right? Overall concept, economic causes of sectionalism, that was what the thing was about, sectionalism in the 1860s. Okay, now, we put down the facts. What we do – there is a particular order that we unveil, if you will, or reveal the content to kids. Now, unfortunately, the way I've got this set up here it's not doing it, but so – and use your good imagery here and pretend none of this is here and none of this or none of this – the only thing you see here is good ports. Okay? So, we may get from kids, hey what do you know about – I mean, so you can try to get this from kids. Or we may put it on the table – hey, one of the things that characterized what happened in the North was good ports. And then we can go through each of the other characteristics, however you want to most effectively teach that to kids – say, here are the characteristics here, then we'll go here and do it like this, okay. If in the North we know they had good ports, what do we know about ports in the South? They had a lot of good natural resources in the North. What do we know about them in the South? And go down each of these characteristics so they see if you go here, then what to do you have there? If you go here, what do you have there? As obvious as that may seem, it is that sort of breaking the task down like that enables kids to see how you make the comparison. Now, you're going to see in a moment why it is critical to do that. Okay? So, we'll do that kind of thing.

So, we'll display some facts – the diagram here also has some steps to prompt strategic thinking. Actually this up here is for you, the teacher. These sort of tell you the steps that you'll go through – communicate targeted concepts, you name what they are, and so forth. Now, let me show you how this works before we get there. Okay, so if you see how we have the facts here and facts here. If we now want to come to like characteristics – do you see how it's easy to get the like characteristics? They're across, so the kids can do the comparing. So, you're showing, here's how step by step, systematically, you go through to make that comparison. We put the like characteristics here and then the things that don't match up we put the unlike characteristics here. So, see, it's every – it's what a Venn has. That's just a Venn diagram, only in a different configuration, right? But, we have taken the kids through it in explicit step-by-step fashion so they see the mental process, the manipulation, the information we went through. Now, if we don't do that, this is no more than a graphic organizer, period. And it will not move behavior. It won't. If we're going to have valuable Tier 1 interventions for students it's this kind of explicit instruction that has to be going on or we just won't have a viable thing, and hence we'll have to just refer all the kids onto the next tier.

Okay, now, here's what a Venn doesn't have, and you're going to see the power of this. We come down here, then we look at categories. Remember the cookie jar, cookie/cookie jar thing? Okay, the facts are cookies. The categories, the umbrella, the rubrics are the cookie jars. So, what we want them to come up with is labels for the cookies – what's the label of the cookie jar? Now, for your gifted kids this is higher-order thinking. For example, if we're going to take

these _____0:15:35 characteristics, immigrants in the labor force, slaves in the labor force – see, I wanted this crossed, covered up – what would be the name of the cookie jar for that?

AUDIENCE MEMBER: _____(15:48)

DR. DON DESHLER: Oh good, you're sharp. But, you see how if you give kids two facts like this and says, okay, what's the label for the cookie jar? What's the label for the category under which they fit? Now, here's why that's important. Here's why that's important. We're going to come down here to the summary, rather than the definition. If we're going to have kids stand back and summarize this comparison across North – the economic conditions North and South – here's a summary down here, and listen where this language comes from. Okay. Economic conditions in the North and South in 1860, where did that come from? Up at the top you name them. So you give them a formula for how they do this and kids with language problems they need that kind of prompt to get them going. Were alike because both had good natural resources, ports, and credit. Where did that come from? They were alike because they had – what are they naming it with? The categorical language. Their primary sources of labor and profits were different as was the quality of their land transportation. Where did that language come from? The language comes from here. That's how you and I summarize, that's how we paraphrase, that's how we learn information. That's the kind of language good learners use. What kids who struggle in learning do is they try and with good effort they say, "I'm going to cramp this stuff in." And look at all the facts that they've got to cram in. Okay? Whereas, if you'll learn the labels of the cookie jar, the higher-order language, that gives you the things from which you talk. Now you can also use a graphic like this and use it as an organizer for writing. Can you see the main idea and the details here, how that can happen? These are the main ideas and these are the details. Questions on that – I'm sorry to drill so far down on it, but it is this level of manipulation and explicit instruction is where it is at if we are going to have any hope of being successful with kids in Tier 1.

Yes.

AUDIENCE MEMBER: _____ (18:37-0:19:12)

DR. DON DESHLER: Yeah. And it's a way for you to guide it and engage kids. You can see how you can scaffold something like this. I'm sorry I didn't have the words off here.

Yes, question.

AUDIENCE MEMBER: ____ (19:24-20:05)

DR. DON DESHLER: Yeah, good question. If you remember on the concept mastery diagram today I said, hey, you can use that as a review. And this would lend itself beautifully to a review. On the inquiry, you know, where you want them doing the digging and so forth, hey, all for that. What we just need to do is to make certain that all the kids in the class can do the digging, you know, to have some scaffolding for them. But, yeah, you're right, we certainly don't in any of the work we do want to make things overly dependent or if you make them dependent or if we do a little teacher mediation, and that's fine, I mean that's just the way it

happens. When we're a little heavier on teacher mediation we just need to be sensitive of moving then down the continuum to student mediation and not stall there. Excellent point.

Someone else. Yeah.

AUDIENCE MEMBER: In thinking about getting the kids to come up with all of this, there is, there are some other graphic organizers that I use with the kids to do inductive reasoning, where after they've looked at the text, read it, and then write down all the details they can remember, and then get in groups and pull out those details and categorize them themselves, and come up with whether it's ports or whether it's economic, or whether it's like categories or not like categories – and they come up with those categories, and then they further categorize it to come up with ______(21:56)

DR. DON DESHLER: Yeah, which is good. What you need to make certain happens, if they are going to be doing that, is that the categories they come up with indeed are higher-order categories, okay? And that's no small trick in order for that to happen. And secondly, are they – do they have some parallelism to them so that indeed it can lend itself to a meaningful kind of summary. All right. Bear in mind, this isn't the only thing – this – you have to determine where this gets positioned. There may be things preceding this, some films, there may be some reading in the chapter and so forth, when this tool – this isn't the only time they get this content. This is a tool for helping them really tie it down and enhance their understanding of it.

Other questions - yes.

AUDIENCE MEMBER: (22:54-23:11)

DR. DON DESHLER: Yeah, good point. And I'm sure you don't just say "go to."

AUDIENCE MEMBER: _____ (23:17-23:49)

DR. DON DESHLER: Yeah. And then at the end, then you can have some extension things where they start to use this, yeah.

AUDIENCE MEMBER: I think sometimes where we get confused or get kind of off the track as educators is we confuse _____(24:02) learning with freedom to go anywhere you want to go, whereas what we know is that there has to be what is it we want them to know to be able to do it, and we can be crystal clear about that in our planning and thinking, and then we can determined the amount of scaffolding we need to get to – in order to get them there. But even in an _____(0:24:20) process we should know the endpoint they'll need to get to.

DR. DON DESHLER: Yeah. Well said. Beautifully said.

AUDIENCE MEMBER: Have you used this with some of your students in some of your studies at different stages of a topic mastery, like introductory stages, middle stages, or new stages? (24:26-24:44)

DR. DON DESHLER: Yes.

AUDIENCE MEMBER: Do you see a significant difference?

DR. DON DESHLER: In outcomes you mean?

AUDIENCE MEMBER: _____ (24:46) I would love to see a _____ (24:50)

DR. DON DESHLER: Yeah, that's – We don't have data differentiating that. We've done it anecdotally, looked at it to see – but we've not done formal studies on what you are proposing. Yeah.

AUDIENCE MEMBER: _____ (25:07-25:24)

DR. DON DESHLER: Um-hmm. Great. Great question. You know, the scaffolding and the application. Let me tell you, if you do this just envision what happens. For a unit of instruction you may only do one of these. You know, for every comparison, I mean you choose your poison – you know, where are you going to do it – because it takes some planning time and so forth. So you say, what's going to be the high leverage – what leverage point am I going to push. Okay? But, just envision – if you use this and really soak it, where the kids learn and go through and do it – and let's say you have 20 units in a year. Okay? Can you envision where about unit 12 or so of kids have been through this, where they'll start to think differently about things? They do. And when they go into other classes where teachers aren't using this at all, they'll come back to teachers _____(26:26.0) and say, "Can we get some of those blank sheets that we can use?" That's what you want to get kids to. Yeah.

AUDIENCE MEMBER: (26:34-26:42)

DR. DON DESHLER: Okay, where – let me tell you, what goes behind each of these is a little instructional manual. Those who are – parts of it are – and that's the great thing – we've got some SIM (SIM is Strategic Instruction Model associated with our center) professional developers here. A show of hands who are? There are some back there. So, these are people who have been through extensive, couple of years' certification process and what we've found is it works best if a staff can have an opportunity to get one of these manuals and practice doing this with several so they can think it through. And so, what we can do is match you up with some folks who can provide that professional development to you. Okay?

Let me show just quickly one more – and I'm going to go through this quickie quickie because we've got to move on. This is a question exploration routine. This is just another one, but the reason we came up with this is because of the vital nature of questions. And what we found, you could form a good question for kids, but they don't know – it's not just that they don't know the answer to it – they don't know how to unpack it. Okay. And that's what the question exploration guide is for. And so I'm just going to quickly run through this because I want to show you some data, to show you how we have done this with each of them. So, this one, you come up with a critical question, the lesson that will be the focus – the question that will be the focus of the lesson – and then underlying that question we come up with some key

terms that kids would have, sort of prior knowledge terms, that they would have to have in order to really grapple with that question. Okay, important words, phrases that must be understood in order to answer the critical question. So, it's causing us as teachers to think, if we have that question, what am I assuming by way of prior knowledge? Another thing is supporting questions, the smaller questions that need to be answered in order to be able to answer the bigger one. And then, we come up with a concise answer to the critical question, and then we come up with how to use it in a related area. And then the overall and real-world use. So you can see there are a lot of things we can do to this.

What I want to show you is the way in which we look at kid response on this and we don't release these until we have something like this. This is a study we did in some English classes, high school, in which they were studying *Romeo and Juliet*, a unit on prejudice, and a unit on impetuous behavior. Okay, and so we flip-flopped the design and the kids, and all those crazy things researchers do, but we divide – and we do this with all the studies – we divide the kids into four buckets: kids formerly classified as having a learning disability, those who are not classified but they are low achievers, normal achievers/average achievers, and high-achieving kids. And the goal of this work is that we raise the water level for all the kids. And, so you can see what's happening, and it's not perfect, but how it's going up, and when we flipped them how it's going up. So, the scores for each of the kids are going up. And if we don't see that kind of pattern then we say we just know because know because we've done this enough, if you don't have that the teacher will drop it, because she is going to be losing some of the kids because it's not helping them. And they lose attention and all those things. So, I won't bore you with anymore research data. That's been pretty good. We made it until 2:00 without a researcher showing you any data, huh? Oh no, the first slide of the day was that one thing, right? Okay.

Okay, so, let's just take a look quickly at the second part. So that's one thing we can do is think about our content, enhance it, and so on. The second is imbed strategies within our classes. Now, to help us think about this, Tim and Cynthia Shanahan, a great article 2008 in Harvard Educational Review on adolescent literacy. It's just a marvelous little article. Actually, (Gwen? 31:17) if you send me a note on that I'll send that to you and we can put that there for you, okay? They did a neat study. What they did is they went out in a study and they brought together a bunch of people from the disciplines, teachers from high schools, middle schools in the disciplines, and then some folks who are researchers in those disciplines, and they spent a lot of time talking to them and figuring out how do you learn, how do you get through text materials, and so forth. And so they ended up saying, okay to understand disciplinary literacy, which is the focus of our work, what does it mean by basic and intermediate literacy. And so they define basic literacy as decoding and understanding basic print and word rec, and those kinds of things. Intermediate literacy is more sophisticated routines, being able to read multisyllabic words, some generic comprehension strategies like imagery and summarization, and those kinds of things. Okay, that's intermediate literacy. Disciplinary literacy is more specialized reading routines and strategies, powerful for specific situations, but not necessarily generalizable. Now, let's take a look at what we mean by this and how things are different across the disciplines – or, first of all, what they said, they concluded from their study was this, quoting them: "The disciplinary experts approached reading in very different ways. We are convinced that the nature of the disciplines is something that must be communicated to adolescents along with the ways in which experts approach the reading of text." Now, he was

teaching a disciplinary class in a secondary school. You're a disciplinary expert if you are certified in that area. Note the last sentence: "Students' text comprehension benefits when students learn to approach different texts with different lenses." Okay. So, what are those different lenses? Let's take a look. In history – now, those of you who are history teachers in here – can you share with us, what are things that you value and questions that you ask of yourself or ask of material that you are going through, that you think – that is sort of an approach to learning that you use? Anyone want to venture in that? — Tough question for after lunch. Yes.

AUDIENCE MEMBER: If we are thinking about history wouldn't we be approaching the text in terms of timelines?

DR. DON DESHLER: Okay, timelines is something. Great. Yes.

AUDIENCE MEMBER: Primary sources.

DR. DON DESHLER: Okay, primary sources.

AUDIENCE MEMBER: Cause and effect.

DR. DON DESHLER: Cause and effect. All these things historians – let me put these up here and see if – which embody many of these things. Three things, and there's a lot of this in the literature about it, historians are concerned with, who said it, what's the source? Here's this piece of information. Where did it come from? Right? Corroboration – can I get another witness for this? And contextualization – what's the context within which it fits? Now, those of you who are in history, social studies, do you value those things? Do you use those things? Do ya? I think that's the case. Everything – you know, I talk – well, if we use it, if we look at information as we are reading it, and we're sort of asking those questions or looking for it, why don't we make kids aware of that. Every time we go through it we model that for them and come up with some little routines – hey, what's the source? What's the context within this, you know. And you could have a little set of routine questions. That's the strategy that you are modeling on an ongoing basis for them. That's teaching them how to learn history. We get into English, here's some of the things that English folks look at, is having an understanding of and asking themselves questions about these dimensions as they are going through passages. Okay?

Now, those things aren't even on – some of these aren't on a historian's mind necessarily, or front and center, or on a scientist's mind, but they are in, you know, someone in this discipline. So how do we grapple with – how do we think about this? How do we use these lenses to help us understand the information. Now, who better to teach that to kids, to make them aware of it and model for them – hey, here's how I ask myself questions about this. When I'm doing it, here's what I say to myself. Here's what I do. Okay? Scientists -- you know, some of these things that we are looking at. Oh, were did my math slide go? Oh, that's – yeah, it's great when I have this great visual on the back, this formula is on a chalkboard. Here's one of theirs, is paraphrasing – and get this one – they say: I read, I reread, and I reread again. They spend time trying to connect the – across symbol systems and figure out what – okay, this symbol, how can I put this abstract symbol – how can I distill that down into something concrete

that I can understand? And Shanahans' article is great because they give you several of these in detail.

Yes.

AUDIENCE MEMBER: Inaudible

DR. DON DESHLER: Yeah. That's interesting. That's great. You know, I'll tell you. In all the research we've done, and we've studied this notion of modeling and learning apprenticeship, that is you envision, you hear about – think of apprenticeship – someone doing a carpentry apprenticeship – you know, a masonry apprenticeship; hey, well, our kids in the classroom, they are doing a learning apprenticeship. Right? And we are the master in modeling that for them. And one of the – as we've studied, teachers from various disciplines we find that the teachers who do the most explicit modeling and apprenticing for kids tends to be math teachers. They demonstrate thinking aloud better than most of the rest of us. So, if you want to see how that's done team with some of your math colleagues. But, here's some things, just to tie this up, teachers in literacy-rich classes – and here's just a couple of things that disciplined teachers can do along this, explicitly teaching strategies.

Number one, understand the literacy demands of our texts. That's why early on today I went through how texts change. I talked to you about Coh-Metrix, sent you to that website. If you'll go there and just read some of that information it will raise your awareness level as to how texts can become difficult at different points. Now, as people in the disciplines – I do this, I'm choosing a book for a graduate course I'm teaching -- I look a the content. Right? And that's what most discipline folks look at. Well, if we have kids with literacy problems we have to say what are the language demands and barriers, and what are the things in there that makes this easier to learn. And, if you have a book that fails, that just says, hey, trigger – I need to do some mediation for the kids where the books fall short.

Another thing we can do is provide guidance to students before, during, and after reading. Setting it up, prompting them to do something, monitor what they are doing, and have some conversations afterward, how it worked.

Third, provide multiple teacher models time and time again. I know it gets old to you, but that's how they pick it up. And then have some expectations from them where they're held accountable for and focus classroom text on how to make sense of what it is we're reading, you know, within our discipline. It's having conversations on that.

How many of you have heard about teaching along the diagonal? This came out of Lauren Resnick and colleagues at the University of Pittsburgh, and basically it is — we have content knowledge, right? And we have what is known as habits of thinking, so in this case, in math, growth in knowledge of core concepts, big ideas, and driving questions in math, that's the scope and sequence of the curriculum. But, then we have some growth in ways of knowing and doing math as habits of thinking, habits of mind in math — well, it's a blend between those two, is a teaching on the diagonal. And that's what they've written about. You put that into Google and

you'll find some nice things that Resnick and her colleagues have written about on teaching along the diagonal. So, it's a blend of teaching content and teaching how to learn. Okay.

Now, we're at the – oh, here, I just want to show this to you. If you put this into Google, *Time to Act*. Have any of you heard of that report? This is one that was released by the Carnegie Corporation last fall. This is the main report, but at the time we released that we released five other reports, one of which is *Reading in the Disciplines: The Challenges of Adolescent Literature* by Carol Lee and Anika Spratley. Great, great booklet. All of these are free for the download. This one is great. It has specific examples within math, within science, within the humanities and so forth, where you can see the different language structures and so forth that become problematic for kids. Okay. All right. Enough of that.

Okay, the second tier is supplemental instruction. I hope, just as I leave the other, that you got the impression that, and I say, you don't want anyone, content teachers to be reading teachers. I hope you got the message on that, that the main thrust of it was around the content and how you – so, if you're teaching the structure, content, and key vocabulary, and so forth, man, you've done your – you've given blood at the office – that's your thing. So, we still have kids who that is not going to be – that'll be helpful, but is not sufficient. That's when we need to look at something that's highly intensive in a supplemental class. And we don't' have time to go into it here, but I just encourage you for those places where you have supplemental classes to go in and do some observational studies, even as yourself, to see how is your time used. I'm going to share – oh, I took that slide out – we just completed an observational study in supplemental classes. Darn, I'm surprised I took it out. And the biggest time crunch, of where time is spent, is in non-engaged instructional time. Twenty-five percent of the class period has the teacher not actively engaged in instruction. Okay. Now, in a class like that, having kids sit passively going through books in the beanbag chair, that ain't the routine. The gist is not. We will not close the gap. It is shoulders-to-wheel, really making every minute count, a lot of measuring of progress, regular progress monitoring, and setting high expectations, creating the vision for kids, getting a lot of engaging text and so forth that really get them moving on it.

There is a host of strategies that we teach. For example, we teach a kid and go in depth on how to – remember one of the high-leverage strategies that the National Reading Panel said was questioning. Okay. Well, we have a self-questioning strategy. Good readers, when they're reading they're always asking questions of what it is they're reading. How come this? I wonder why. And they're making predictions. And they're reading to find the answers for the predictions. Well, that's what this strategy teaches kids. It's called ASK IT. The A step is teach the kids to attend to clues in text. What are clues? Clues might be boldface words or word in italics, or something that is out of the ordinary, it might be a graphic or whatever, but it is something that makes kids wonder, and the moment they see something like that to ask a question. How come this? I wonder why. We want to get them into that frame of mind where they are questioning what it is they are encountering in the text. Then what they do is the moment you ask a question, I wonder why – you know, you've heard the saying "Nature abhors a vacuum?" Well, when you frame a question it's sort of automatic that you make a prediction, and so we teach kids, when you ask that question predict what the answer would be. Just make a prediction. And the essence – the footnote on that, we really don't care if the prediction comes right or not, we want them actively engaging with the text, because then they read to identify the

answer, to see if their prediction is correct. And once they find the answer to the question up here, talk about the answer, or put it in your own words. Talk to yourself. Paraphrase it. Summarize it. So, you see how actively we have kids attend, say, keep, identify, talk. It's a very action-oriented approach to teaching kids strategies, but it's a very targeted one, and it's this kind of strategy that is taught.

Now, one thing that our research – and not just us, but a boatload of people, and we've been doing research sufficiently in the strategies world for several decades now, my word – the strategy of the week, the strategy of the month, the flavor of the – okay – doesn't work. Fewer, what do they say, less is more? Okay. In other words, carefully select the ones that you begin with and really teach it deeply and give them a lot of opportunity to use it and apply it in a lot of places. I'll tell you – you see these books, you know, and I say this – please understand, I have the greatest respect for the work that Bob Marzano has done and I know it's a part of the resource that is referenced – and he does great work. His work can be misinterpreted because he has a lot of things there that say okay, we'll do this one this week, this one that week, this one —just don't go that route. We have ample data to tell us that is not the way to go. Again, sprinkling immersion – remember that one.

Okay, summarizing, basically is this. Where you have kids read a paragraph or a chunk, you don't have to get hung up on the unit, but you teach them to chunk what it is they are reading. To do that and then to periodically push the pause button. Number one is engage and read a chunk, then stop. Step two is push the pause button and when you push the pause button sort of reflect back and ask yourself what was the main idea in some of the details I just read. Ask yourself that quickly. And then you re-engage the car and you put the main idea and details into your own words. So, read, ask, and put, But, the key thing there is that teaching kids that you don't do the whole thing, but you chunk it, you pause, you work with it, then you re-engage. It is not just going through it, but it is that working with kind of notion. Questions? Go ahead.

AUDIENCE MEMBER: Inaudible

DR. DON DESHLER: Yeah. Oh. Thank you. It's so well said. That's such a critical point. This looks very simple, doesn't it, on the surface? Simple, simple. Very complex and like that, and so if it is very dense like that the chunk becomes smaller. Right? And sometimes the chunk is indeed a section where you stand back and do it. So, it's the experimenting and working with that, modeling, try it with pairs. Debriefing on it. How did it work? What should we have done differently? How could we refine this? For this particular book, how can we make it work best for us. Boy, those kinds of conversations are golden. Okay.

One more thing and we will take a break. Okay. What we've done is we've had some individual strategies. Several in this room are very familiar and prepared to provide professional development on those. We've been moving in an additional direction within our center. In the last three or four years we've developed two reading curriculums, entire reading programs that are integrated, that are not just isolated strategies, but they are integrated. One is called fusion reading and one is called extreme reading. And I won't bore you with the details and differentiation, but just to make the point that it's a multi – in the case of fusion it's a multicomponent intensive reading program for sixth to twelfth graders who are significantly

below and getting them through about three or four, and that's it, high-leverage strategies, but multiple applications so it really becomes fluent with them. We also address the issue of motivation and student engagement – that's front and center on the thing. Most of these kids are so turned off to it, how can you get them back engaged. There is reading instruction and then we find because we have to have every minute count the whole notion of classroom management is key and I see in the state document a referral to Randy Sprick and some of his work. That can be critical here.

Okay, and I'm going to end with – I'll just show you this. There's a course organizer and that's little l_lattis shock_____ (00:53:3), but this is the fusion reading program. There are multiple components to it and so forth. It's a self-contained initiative and effort. Same thing with extreme. What I want to show you though is this is the way in which we structure, and this isn't the sacred one, but it's just and example – the way in which we structure a class in a week. You see the minutes up front – one 10 minutes, 2 minutes, 30 minutes, 2 minutes, and so forth – for an advanced organizer, some guided practice, transition to small groups, and we're watching the transition time, and then partner independent practice, you know, and so forth. In other words, and then we're timing ourselves, we're evaluating ourselves on how much time we're here and where we're missing it. Where we're missing it on the transitions. And when we come back after break we'll look at some of the hidden factors, we'll see where that's so important to do. Okay, could we take 10 minutes, 12 minutes – could we go to 8 minutes? 8½? Okay, because we only have about a half hour to – yeah, so we've got some juice to cover here.

Boy. Okay, what I'd like to do is, just standing back from those tiers, Tiers 1, 2, and 3 – the three bubbles – in terms of the instructional methodologies. I went through with you Cue, Do, and Review – right? Okay, that's in Tier 1 for the content enhancement. When you're doing strategies, modeling a strategy, it's I do it, we do it – you know, practice with one another – you do it individually. So, it's Cue, Do, Review – I do it, we do it, you do it. Okay.

Now, when we move into Tier 2, 3 and it becomes more intensive, look how the instructional methodology gets much more explicit, much more detailed. Okay. And, I'll tell you, there's a lot of research in the literature about these various instructional stages here, that demonstrates their power. Okay, so if you're working with kids who are struggling and way behind in that gap, this is where we want to be with each one of these and if you'd mark down – and I'll put a couple of manuscripts on that describes these stages for you, okay? But, it's understanding that distinction. So, it's not just what we're teaching, but how we're doing that instructions makes a difference across the tiers. That's what I think is so great about RtII in Pennsylvania is the distinction, I see this business here as largely being – this is my interpretation – largely being instruction. I see this as being the intervention part. Important distinction.

Okay, some hidden factors. Okay, have you ever been fooled by hidden calories? Okay, what are hidden calories? They are calories outside your diet. They're off the radar, they're little snacks, extra portions that seem inconsequential, but they add up. Right? Have you seen this? Like, okay, this is 300 calories and this is 300 calories from IHOP, but it's only a third of an omelet. Okay, so imagine if you do the whole whopper it's 915. Okay, here's waffles with berries, that's you know – and this one is 300 too, but that's a fifth of a Bob Evans Carmel Banana Pecan Cream Stacked and Stuffed Hotcakes. So those are some hidden things there. So,

there's some hidden things that we find to really move the needle that are beyond some of these instructional things we've been talking about, but man, they can either be really helpful or they can get in the way.

Number one, targeting the right students. That is, getting the kids who belong in supplemental classes there. This is from some work we did in Green Bay and what we're looking is, you know, different kinds of kids below certain reading levels into the class. Well, let me tell you, this school looks fine. Several of the schools where we're working – get this – they have as many as 25% of the kids in the supplemental class who are reading at grade level. How do they get there? Well, they had to have a place to put them. Okay. But, those are – and we're going to see where this is a double crime later on because of the limited number of slots, but that's making certain we get the right kids in the right place.

Then, using the right interventions. This is something we did a study on ourselves, in this 40-school thing that I've been talking about. These are various interventions. See, this 1, 1, 1, 1, 1, 1, 2, 3 – or there are just 2's, 1's and 2's. There is Tier 1 and Tier 2. This is literacy. We're trying to move the literacy needle. We looked and said, where are we spending the time and we found out we're primarily spending the time here on three of our content enhancement routines and virtually nothing here. Nothing on our vocabulary routine or whatever. We say, why is that happening? And as we drove down I – you know why it was? Those who are doing the professional development and the coaching – these were their favorites. Okay? Can't afford that. Optimal use of instructional time. Watch this one. The block - -any of you have the block? Ninety minutes or whatever it is? Okay. So, I was in – we were in a district in Chicago, observing, and we noticed that they finished up early and so we were talking about this and the comment was made, well it was only 14 minutes, okay, where the kids were just sort of idling their engines. So I did some math on that. Okay, 14 minutes per period times 5 periods per week, times 36 weeks per year, is 2520 minutes or 42 hours, or 7 school days. Okay. So, that's – you know, we can just fritter a little bit of time here, a little bit of time there, and it can really add up to some serious, serious time. And for the kids with a gap and, you know, that's a hidden cost that can just zap us, just absolutely zap us, because the most powerful learning variable we have is time on task. Yes.

AUDIENCE MEMBER: Inaudible

DR. DON DESHLER: That's right. Precisely. Yeah. A lot of things can happen, repetitions and so forth. Yep. Absolutely.

Okay, the next one is fully tapping available resources. Let's look at these data from some of our work, okay. Now in this school there are 345 ninth-graders. One hundred fifty of them are 2 to 5 years below grade level – okay – that need, you know, that intensive assistance. Sixty slots in the school. In other words with the number of teachers they can accommodate 60 kids, so there's 90 who can't be accommodated, but only 45 are placed, so they have 15 unused slots. This is not uncommon. Just about a year and a half ago somewhere the preliminary work to word-generation study that Katherine Snow – we were working with her – in the Boston Schools and they made a mega, mega, mega dollar investment in Read 180. Now if any of you are familiar with it, you buy slots, right? Sixty-three percent of their slots were being used. And

they had a huge literacy problem. So, this is why we just need to --- are we using the resources we've got?

The next one is student absenteeism. You think you've got a problem. Take a look at this. This is – okay, first, second, third, nines (1:04:04) week, total absences. Look at those, number of days missed. Now that's an extreme, but when we look at, you know, the cumulative effect of passing up the school time, you know, in the day and then not getting kids in the full resources and look at the absenteeism and look at the number of teachers who miss professional development, or whatever, and these things can just cumulatively add up to have a really substantial impact.

Leadership stability and strength. Boy, I can tell from my conversations there are some powerful leaders in this room. Yeah, it's neat. Okay, this is some of the – three of the schools, one, two, and three. Anything in red is a change – red or purple is a change in leadership. Okay.

The number of teachers prepared to address literacy needs. Now – the message I hope you picked up on the content in literacy continuum, it is school-wide. Right? Everyone owns part of the problem – part of the issue – has the opportunity. Well, we looked at the professional development that was offered across these schools and we taught – the interventions that we're looking at was like the concept comparison routine or the unit organizer routine – the ones I went through with you. So, that constituted a professional development session. After three years, okay – forty percent, a little over forty percent of the teachers had trained on no interventions. And we've got the two lines – the red is this school and the blue are all the schools. So you can see, and the number who have three or four of those is virtually almost nonexistent. Now, if we want to move that needle we've got to stand back and say, are we all bellying up to the bar? Are we all getting the training that we need because we can't even talk about implementing if we don't even get it. So – and we learned, you know, we never thought this would be the thing – how role is kept for professional development. And I don't know, that may not, is probably not even a problem in Pennsylvania, but I was amazed at how people skated out on professional development – it was sort of a day off. You know, a sort of volunteer, going. So that – I don't know if that's a problem in your area, that's just something to look at. It's a hidden cost that is in there. Student-friendly union agreements. Okay, we were having to replace -- replacing prepared with unprepared and interested teachers. Okay, now, we had eleven fusion reading teachers across some schools, eight first- or second-year teachers because no one really wanted to teach it, okay. So these new ones said, okay, I'll do it. So we train them. I mean we invested a boatload of energy in training them up. Whoops! Then we come along and have to cut back some teachers. Guess who's the first to go? And, we replace them with teachers with seniority who have no interest or training – that isn't student-friendly.

Okay, teacher beliefs that struggling learners can be successful. We talked about this at some breaks. But, the belief issue, and remember on my thing that beliefs is one of them. Here's one: Quality – given high-quality instruction how confident are you that struggling adolescent readers can read close to grade level? Okay, so you can see that 66 percent, even given high-quality instruction, are not confident that they can succeed. So, you know, if we believe that they can't, do you think we communicate that to kids? In terms of expectations. In terms of how seriously we take that time, and so forth. That's a huge one. That's a huge one.

AUDIENCE MEMBER: Inaudible

DR DESHLER: Isn't it? A real disconnect there. Okay, here's some – we did some surveys <u>gen ed</u> (1:09:05) teachers. They were satisfied if fifty percent of the students – of course, this wasn't Pennsylvania so this doesn't hold for here – okay, satisfied if fifty percent of the students mastered fifty percent of the content. Students with disabilities failed because of two things: their attitudes and low goals, and their lack of skills and abilities. Okay, some more. The biggest barrier to students with disabilities' success is their attitudes, their neglect of doing the work, their low ability, their poor performance, or their unsupportive parents. So, again, not Pennsylvania, but there's – we're getting off scott free here. Okay, I don't do windows, I don't do toilets – whatever it is. Okay, so we asked teachers, we said okay, is – if you had – is it important to teach kids the content. Yes, absolutely. Is it important to teach them how to learn the content? Yes, absolutely. So we knew we were asking the wrong questions. So we reframed it. And we said, if you had a hundred minutes and you had to divide that between teaching content and teaching how to learn the content, how would you divide it? Okay. Now, rather than saying this is good or bad, I think what we need to do is understand this and, as we're thinking about RtII in secondary level, and as we are trying to bring into the gen ed classroom some of the things we've been talking about today that really capture some of this strategy part and reconfigures this, there is a limit as to how far we can go, and we need to seek to understand that. But this all plays into the dynamic. You see, if we're going to be successful with RtI my – as I understand this complex thing at this point in time – if RtI is going to survive in a school, or if the construct is going to survive over the long haul, there has to be relative strength and integrity at each of the tiers. You cannot have, you know, the old adage, "A chain is no longer than it's weakest link", and I talk about this in one of the articles that's on the web, and I go through this. But, if you say, hey, we don't deal with that, we don't do windows, we don't do toilets, you pass that onto the supplemental reading class. What happens, that class gets over subscribed. Those teachers get overburdened. They exit. The system is malfunctioning there. Okay. Right now what's happening in RtI in many places is the overemphasis on Tier 1. It's all going to take place there. So there's some heavy burdens going that way and very little thought is given to the upper tiers. And so we can have the same dynamic happen there. In order for, I think, for it to work we have to have everyone recognize the unique role and the important tole that each is playing across the board.

Well, I've been asked and Wendy will bring out her shotgun and shoot me if I don't address this. So, I'm going to stop with that. Wendy has asked me if I would address for just a minute one other issue before we switch, and that is the status of the reauthorization of ESEA or IDEA and/or – and, I guess. Clearly it is not going to happen before the elections. It was on track, that was part of the President's agenda, part of Duncan's agenda to try to get those things through. I was asked to testify before the Senate Health, Education, Labor & Pensions Committee, the HELP Committee, which is the committee that generates educational legislation out of the Senate side, and did so on high schools and adolescent literacy and graduation. They were really – and that was early May – they were trying to push it through. The hope was next to zero because if it didn't get through by the end of May they're just not going to touch it. They won't touch it before the election, so it's off the docket. What I think – here's some things that I'm hearing as to what may influence or inform the passage of it. There's three pieces of legislation, sublegislation related to secondary, adolescents. One is the LEARN Act. Have you

heard of the LEARN Act? Those acronyms stand for something, but in essence it's a comprehensive literacy act. It's taken reading first and striving readers and melded it all into one. I think it is a good piece of legislation. The term, either RtI or MTSS, Multi-Tiered Support System, which is sort of an equivalent, is in that legislation, and it -I just think it's well done. It talks about validated instructional approaches. It gives some latitude and flexibility to teachers and so forth. I just – I hope that one passes. But it will probably be woven into ESEA. The other is a piece of legislation – it's for middle schools. I forgot the name of the particular bill, but it is recognizing that's where we need to be successful. Because of the compelling data if kids move into the ninth grade and are not successful there the probability of them not graduating, let alone being career and college ready, is highly remote. And so there is a recognition of that in putting a lot of the emphasis there. And, I'll tell you what I'll do. I will – because I describe each of these in the written testimony that I did, we can put that up on the Web, because it addresses that and some of the other issues around ESEA. But who knows what flavor it's going to take. It's just interesting to see the whole dynamic that's changing in Congress. I mean, the President has lost much of the political capital that he had, you know, when he came into office and went through the health reform thing, and you know, there's just a lot of push-back on additional expenditures. And, so – and then with the Gulf situation and so forth, I just don't know where education legislation is going to be falling. I think some interesting things to watch, though, some signals – who would have thought – and I'll end with this: Who would have thought the biggest piece of reformed educational legislation in the last 50 years would have been put forth by a Republican president, President Bush, No Child Left Behind, and the most liberal Democratic president to come on the scene for years would be supporting charter schools and taking on the unions. Go figure. I mean, so, you know, they said it's the equivalent, what Obama is doing relative to these things is sort of the equivalent of Nixon going to China, you know. And so It's going to be interesting. I just think we're living in fascinating, fascinating times. We've not seen anything like we've seen in the Race to the Top funds, the I3 funding, and so forth – and how that plays out is going to be – we need to all watch what happens in Tennessee and Delaware, who go the first Race to the Top funds because they did – you know, it's interesting to watch what the administration is doing. Basically, they are holding guns to people's heads and saying if you want money here's how you need to come into line to get it. It's going to be interesting to see what the outcome of those changes are because they are major landscape changes that have occurred there. And I think it bears all of us watching it to see what does occur.

This has been a joy to be with you. What great questions and great perspectives and observations. Thank you all so very very much.