**MODERATOR:** Good morning, everyone. Welcome to this morning's session, a content literacy continuum, a tiered framework for secondary schools. And we're in for a real treat today. To be inside in the air-conditioning in such a lovely facility and not out there where it's going to be dripping humid, I understand. So we're blessed in many ways today.

I have the honor of introducing our speaker this morning actually for, to spend the day with Dr. Don Deshler. He is the Williamson Family Distinguished Professor of Special Education and director of the Center for Research on Learning at the University of Kansas. And I was to share with him, I had visited out there when I became a SIM trainer, and it's a fantastic place if you get to visit.

Deshler serves as an advisor on adolescent achievement to several organizations, including the Carnegie Corporation of New York, the National Governors Association, the Alliance for Excellent Education, the Council on Family and Literacy, and the U.S. State Department. He has presented on matters of educational policy regarding adolescent literacy to the nation's governors at the James B. Hunt Institute for Educational Leadership and Policy, and has testified in Congress and several state legislatures on secondary school reform. Through the Aspen Institute, he has worked with members of Congress to shape policies addressing the challenges of high school reform.

Please join me in welcoming Dr. Deshler.

**DR. DESHLER:** Great. Thank you so much, Wendy. Well, good morning everyone. So nice to, oh, I love it. Boy, that tells you this is a great group. Although I know you're not, or that you are quite religious, because no one has filled up the front row. Just like when you go to church, everyone's in the back hoping the collection plate doesn't get to you.

I would really, my preference would be to be out among you, but I've been threatened with my life that if I deviate further from this chair or this, that I get outside the lights, and apparently they're trying to capture this on TV for whatever, who knows why they'd want to do that. But thank you so much for showing up. You know, a presenter's worst fear is that no one would come. And something that's even a greater fear is that, yeah. Yeah, now I'll add a third one to the list. That's another one. Is that you'll all leave, I mean, before the designated time.

And the reason I say that, my first year of teaching at the University of Kansas, I was the last, this is, and I'm still trying to work my way over this and I've been there 36 years, is I was obviously the last one that they offered the job to and that would accept it, because it was so late in the spring they had to print the course catalog, and that was, and some of you young ones in here don't even remember when there used to be course catalogs at universities not online. And so they printed it. And since I wasn't hired, what they did is they put the name of the, Floyd Hudson, who was a member of our faculty.

Well, Floyd happened to be an outstanding teacher. He won every teaching award the university has to offer, and so his name was in everyplace I was to go teach.

And one of the classes I was to teach was known as an outreach course. You know, where you get in our car and you drive forever, and in Kansas you can drive forever, and to go out there where no else wants to go.

And I go into my first class. You know how nervous you are and everything. Totally filled. The walls were lined and, I mean, my pulse is going like this. And I welcomed them and said, you know, this is such and such course, this number, this title. I said everything is as listed. There's one minor exception, I said. Rather than Dr. Hudson teaching the course, and there was this huge groan, I will be teaching the course. And I could just tell the looks on their faces. Unlike you, they weren't pleasant.

And I said, now I understand why some of you may want to take the course because of Dr. Hudson. And should you choose to drop, I'd fully understand, and don't hesitate to do so. Not too late to get into another course. This is not one word of a lie. At that moment, about three-quarters of the room, en masse, exited the thing. That was so traumatic. I'm still working my way through it to this day. So if you decide to leave, just do it a little strategically, you know. Maybe a few from this side and then a few from the middle.

But with that said, I want this session today to be beneficial to you. The things that are happening in Pennsylvania relative to tiered interventions, RtII and so forth, is truly extraordinary. And I can say that, and not idly, for this reason. One of the projects that we've got in our research center, the Center for Research on Learning, is the National Center for RTI, which is funded by OSAP, and it is, our charge is to provide technical assistance to the states. We're in cooperation with Vanderbilt, Doug and Lynn Fuchs, Don Compton, with American Institutes for Research in doing that.

So we have been working with all the states around the country, one of which has been Pennsylvania, and we have spent a good deal of time here. And we've spent time in some of the specific schools and school districts because of the exemplary practices that have been called to our attention. And so just hats off to you and just to let you know.

Our thinking and our understanding of some of the complex vexing issues underscoring RTI, I need to say RtII, don't I? Or do you say two I? Rt two I?

WOMAN: No.

DR. DESHLER: Rtll?

WOMAN: ...

**DR. DESHLER:** Rtll. Okay. Has been informed by what you're doing here. So hats off to all of you.

But let's have a conversation today. As I put things on the table, I'm doing so based on work that we're currently doing in hundreds of schools around the country. As a center, we're very committed to having as a laboratory what's happening in schools. So we're out there trying to get tiered intervention frameworks in place.

And some of, just to let you know, some of the districts that we're working in currently is Sacramento, California, Alameda, California, Orlando, Springfield and Chicopee, Massachusetts, Portland, Oregon, Detroit, Michigan, Indianapolis, Akron,

Ohio, Green Bay, Wisconsin. Those are just a few. So just say, that we're trying to understand what is going on in different states, in different locales, in different schools, and in particular, all of our work has been done in middle schools and high schools.

So we're trying to even understand does the paradigm that we've used for elementary kids and elementary schools, and we've tried to extend it up, haven't we? Is that the wise thing to do? Does it make sense to take that paradigm up, or are we being shackled, if you will, by some of those assumptions, and is it sending us perhaps down a wrong path? So those are some of the questions that we're currently grappling with.

And I'll put some of the others out as we move along. But before doing that, let me learn, may I step up here? Thank you. He said, this is when we get even with you for all the things you teachers did to us when we were students in school. So I feel like there's a cattle prod on each side here.

How about a little bit about you? How many of you are in the classroom as teachers? May I see? Thank you. And of those of you who are teachers, how many of you are in disciplines, like history, science and so forth? Okay. What, like social studies?

MAN: Science and math.

**DR. DESHLER:** Science and math. Thank you.

WOMAN: English.

DR. DESHLER: English?

WOMAN: ...

**DR. DESHLER:** Okay, thank you. English, okay. How about, do we have any special educators, Title I, remediation? Okay. Thank you. How about administrators? All right. I missed a couple pigeonholes. What have I missed?

WOMAN: ...

**DR. DESHLER:** School counselors, I'm sorry. Great.

MAN: Professors.

**DR. DESHLER:** University professors. Great. Coaches, great.

MAN: ...

**DR. DESHLER:** School psychs, thank you. Speech-language? Wonderful. Thank you. Anyone else? Okay. Hey, great, beautiful diversity. So, and that is so important. So please, raise your hand. The best thing that we want to hear today is, yeah, but. Okay? Because I'm going to be putting some things out here that represents our, I don't know if it's good thinking, but it's our best thinking at this point in time of things we're

doing in schools. And if you see some holes in it and you've learned some things that we're missing, boy, we want to know. And I know everyone would benefit from that. Is that fair? Okay.

Okay. Just a little bit of how it, oop, that went too quick, how I'd like to, I'm going to be looking at things sort of from two perspectives today at different points in time. This is a picture of the universe taken from Hubble, and so that's sort of a stand back from and look at the big picture. And boy, I'll tell you. In the work that we're doing, our experience has been in RtII is that it's important to, on occasion, push that pause button and stand back and say, what is really happening here? Are we getting too caught up in the technical aspects of it? Because goodness knows, there's a lot of technical aspects to this business, right? And are we getting too hung up on that and are we allowing those things to drive what we're doing?

On the other hand, we're going to also, oh, that's sweet. Freezes on the second slide. We're going to look at it, just really zeroing in on some finer aspects as well. But, and I've, well, this is far enough. I'm going to start by asking you a question, because it is going to be a little activity. So as this fires up, I'm going to give you the directions for it, okay?

We know that there's a gap, right, for adolescents, a gap between where many of them are performing and where they need to be performing. Right? So, my question of you is this. And if you'd take out just a piece of scratch paper and in bulleted form list down what you consider to be the three main reasons why that gap exists among struggling adolescent learners. From your experience, why does that gap exist?

Okay. Now what I'd like to have you do, if you could, if you'd identify a partner just sitting close by that you'd be willing to talk with or someone right behind you there, if you want to try that one. Thank you. Now here's what I'd like to have you do as you identify the partner is the following.

### [Simultaneous discussion]

**DR. DESHLER:** Whoops. Boy, the horses are out of the barn. Sometime before lunch, if I might get your attention up here. Man, I didn't know I'd bored you that quickly. Shh.

Okay. I'm going to give you a few more instructions here. Now among you, if you decide who's going to be the A and who's going to be the B. Don't do it yet. And then I'd like the A's to tell the B's your three items. Then I'd like the B's to tell the A's your three items. Got it? Now you can talk.

Okay, if I could have your attention for just a moment. Now what I'd like to have you do, assuming A shared three and B shared three, if you were keeping a list, there'd be six on the list, theoretically, right? Now what I'd like to have you do is huddle up again. Now there may be a little overlap so you have five or something. But I'd like you to huddle up again and see if you can come to consensus on what, between the two of you, consider to be the top reason. Out of those six, you got to select one.

Okay. Probably had enough time to identify one. Now in your best hallway voice above the din, because we want to try to pick this up for the cameras, if, I'm going to go around and just point to some pairs, and if you would share with us just by shouting out your number one or, yeah, you're top one. Okay? Ready? Okay.

**WOMAN:** We said lack of prerequisite literacy skills.

DR. DESHLER: Okay. Lack of prerequisite literacy skills. How about here?

MAN: Lack of . . . students of . . .

**DR. DESHLER:** Oh, okay. So turnover, the churn.

MAN: The churn.

**DR. DESHLER:** The churn, okay. How about here?

WOMAN: Okay. For us it's being the lack of attendance and not being where you need

to be.

**DR. DESHLER:** Okay. Lack of attendance, not being where you need to be. How

about here?

**WOMAN:** We said gaps in their . . . content is . . .

**WOMAN:** Fragmented learning.

**DR. DESHLER:** Fragment learning, the prior knowledge is missing. Great. Yes.

**WOMAN:** We think lack of explicit strategic construction.

**DR. DESHLER:** Lack of explicit strategic construction. Great. How about here?

MAN: . . .

**DR. DESHLER:** That was your number one as well?

MAN: . . .

DR. DESHLER: Oh, okay. Thank you. How about the front row here?

**WOMAN:** Some of the differences . . . been cultural understanding.

DR. DESHLER: Differences in cultural understandings. Good. Let's see. How about

back here?

WOMAN: ...

DR. DESHLER: Yeah.

**WOMAN:** We said there was a gap early on that was never addressed and so . . .

**DR. DESHLER:** Ah, started out that way. Just gets bigger and bigger. We're going to see some data on that in just a moment. How about back here?

**WOMAN:** We're not teaching what they need.

DR. DESHLER: We're not teaching what they need. Thank you.

WOMAN: I think we came up with the teacher usually does better . . .

**DR. DESHLER:** Interesting. Before you can teach them anything, they need to believe you and connect with you and so forth. Is that right?

WOMAN: ...

**DR. DESHLER:** Great. How about here?

**MAN:** We also said the lack of early intervention . . . to self-fulfilling promise.

**DR. DESHLER:** Okay. Lack of early, so it's the elementary teacher's fault?

**MAN:** ... but ... they say, well, we are ...

**DR. DESHLER:** Great. Thank you. Yes.

**WOMAN:** I want to expand on the one over there. We said lack of motivation due to the fact that . . .

**DR. DESHLER:** They're being taught or expected to learn? Great. Yes.

**WOMAN:** . . . expectations that can actually happen on the part of the adults believing

**DR. DESHLER:** Great. Wow. What great, great, yes, thank you.

**WOMAN:** We said effective diagnosis and lack of individualized strategies.

**DR. DESHLER:** Okay. So we're not lining instruction with the needs of the students.

**WOMAN:** The individual students.

DR. DESHLER: Students, yeah. Great.

**WOMAN:** We said . . . challenging some students and they give . . .

**DR. DESHLER:** They, yeah. Great. They fail so frequently, yes. Wonderful. So, let's see. Where do the majority of our explanations seem to fall, in which bucket here? Is it, did you pick up where we, this is very interesting responses. Where would you say the majority that we were giving, where do you think they fell?

[Simultaneous discussion]

DR. DESHLER: Teaching. Let me tell you. Yes.

MAN: I'd rather say learning. When you say teaching . . .

DR. DESHLER: Okay. So, pardon me?

**WOMAN:** I mean, I think a lot of the students and family . . . talk about those . . . they talk about, when I see a kid who's not doing well, I look back through the history from kindergarten on, the family hears it 17 times in different districts and . . .

DR. DESHLER: Yeah.

**WOMAN:** . . . you know . . . those gaps there's a . . . gaps other than teaching. I'm not saying that there are other reasons for . . .

**DR. DESHLER:** For it, yeah. Just, and we won't spend any more time here, I think it's interesting exercise for us to stand back and say, as ones who are a part of the dynamic, we're there. Where do we primarily point the finger, if you will? You know, what do we see the main cause being, you know? Do we see it, hey, it's that kid's fault? Or it's our fault? Or, and we don't need to say fault, but whatever.

I think that's an interesting word. And we'll come back to this in a little bit, just in terms, and the reason I put this on the table now is I think it's an important one when we're talking about moving the needle, because our experience has been, we're now on our 33<sup>rd</sup> year in our research center, Center for Research on Learning, which I'm just going to tell you a bit about right now.

Our mission has been from the get-go to markedly improve the following things. First of all, the performance of struggling adolescent learners. Can we alter how they think about learning and approach it and tackle it? Okay. And that's where our first line of interventions was, was to come up with strategies to teach kids how to learn differently who weren't learning well. Okay? And I want to share with you several of those interventions today.

A second major thrust of our work is to markedly improve how we as teachers can instruct academically diverse classes. And if we can't get a handle on that, we're talking about Tier I, if you will, you know, that gap is just going to continue to broaden. And again, I'm going to share with you several of the interventions that we have developed in an attempt to try to make some headway there.

The third thing we've focused on is, okay, how can we reorganize how we do work together? Someone made mention, I forgot who, I apologize, about the fragmentation. You used the term fragmentation, right? And if there's one thing that

characterizes learning from the vantage point of an adolescent, it is fragmentation. Right?

Unlike the elementary kiddo who has the same teacher generally from beginning to end of the day, and that teacher can sort of see, hey, I started with this skill, he didn't get it, I'll cycle back to it? Right? What a kid gets in period one, the likelihood of anything being tied to that throughout the rest of the day is quite remote, quite remote.

So are there some things that we can do structurally that can mitigate some of those challenges? And I'm going to share with you some information of things we're trying to do there as well, as we move along.

Another main function of our center is how we can get our practices into the front lines. And so we've set up a professional development network. Wendy's a member of that. Are there some other SIM folks, SIM professional developers?

#### WOMAN: ...

**DR. DESHLER:** Great. So we have several here with us who are a part of this, who are committed to taking these materials and practices and working with schools in a coaching kind of capacity. And then finally, we're very interested in public policy. You can have great practices, but if you don't have good policy backing it up, a lot of it just doesn't go anywhere.

So that's what our center is about. And since we've been about this business in 36, 32 years, we've completed about \$180 million of contracted work. So we're serious about trying to understand and make headway with struggling adolescent learners.

So here's the little roadmap I'd like to have us follow today. First of all, just spend a couple of minutes, and I'm going to share with you some recent research. We've just completed looking at some of the learning behaviors of struggling adolescent learners.

Secondly, some very interesting things are being learned about the instructional materials kids need to encounter. They present huge barriers to kids. What dimensions of those should we, as teachers, be understanding? If we want to make the path to their success easier, what can we do to make those materials more learner friendly? So we're going to take a look at that.

Thirdly, then we're going to switch into a framework that we have been working on for the past 12 years or so now. It's called a content literacy continuum. It's basically a tiered framework for use in middle schools and high schools. We use the term content literacy because we're about the business of trying to give kids the varying literacy skills they need for science or social studies, right? Social studies, science, and math, and English, and so forth, because they vary. And we're going to a look at how they vary. And the whole notion of a continuum is this tiered notion of intensity and how can we operationalize that, how are we trying to operationalize that in secondary schools?

Then I'm going to move into what we call hidden factors. Some that in, if you take a look at the RTI literature, these things aren't talked about a whole bunch. And quite frankly, we find them in the work we're doing to be some of the most significant factors. Not that we should, that these should ever trump what we try to do instructionally, but let's not ignore them because they can really, you know, counteract the good things we're trying to do instructionally.

And then, whoops, that got cut off. High leverage teaching practices. There's some great things that are, pieces of information that are now available to us, documents, and then I've put several of them on the Web. You can now access the Web to get downloads, right, from this session. Some great reports, free from the Institute for, from IES and from the Center for Instruction and so forth, you know, and what they're finding to be the most powerful high leverage instructional practices for adolescents.

Okay. And then, this is the wrong slide that is in here. Okay. Now we'll come back, forget that one. We're just going to go right here. That one got off a little bit. So let's take a look at the, what we know about the kiddos, okay? First of all, back to you again, here's a question I'd like to have you come up with the answer. How many words a year do fifth graders read who are reading at the 50<sup>th</sup> percentile? Okay. Okay, how many of you say A? How many say B? How many say C? D? Obviously a lot of you don't care.

It is D. D, yeah. Fifth graders, in the course of a year. Now wouldn't you have liked that research job to track around a fifth grader and count the words he's reading? Okay, now to put that into perspective. That's one data point, but let's put it into perspective. How many words per year does a fifth grader read who's reading at the tenth percentile? Okay, what do you think the answer is here?

## [Simultaneous discussion]

**DR. DESHLER:** It is A. Now we have math, math, right? Okay. So how many times more words does a student at the 50<sup>th</sup> percentile who's reading 900,000 versus one at the 10<sup>th</sup> percentile who's reading 60,000? Fifteen times more words. Okay?

Now let's a look at one other figure. How about a student who reads at the 90<sup>th</sup> percentile? What's the answer there? The answer is D. Now there we are, 60,000, 900,000, 4 million. Now do any of you teach classes that have kids at the 10<sup>th</sup>, 50<sup>th</sup>, and 90<sup>th</sup> percentile in your classes? Is that totally uncommon? It's not, is it? It is not uncommon at all.

Now, let's just, what's the difference among those kids as learners? Just how, what are they bringing to the table differently, that 60,000 a year, 900, 000, 4 million? What are some differences there? Yes.

#### WOMAN: . . .

**DR. DESHLER:** Vocabulary. You think there's a little difference in their vocabulary? Huge. Yes, what else?

WOMAN: ...

**DR. DESHLER:** Frustration level. What else?

WOMAN: ...

**DR. DESHLER:** Just experience, right. How about prior knowledge?

#### WOMAN: ...

**DR. DESHLER:** Do you think there's anything different in the habits of learning among the students here? The ability to set goals and to work toward them and to work through frustration and so forth? I mean, there's huge differences, huge differences. And it is these differences, I wanted to give this right up front, because this is what, if we're going to put in place powerful Tier 1 interventions, they need to take into account this kind of diversity. Okay?

And if we can't crack that nut, what's going to, our Tier 2, Tier 3 interventions, they're just going to swell, right, out of control. So, and we're going to spend a good deal of time looking at some interventions, what are some of the features of them that we're trying to build in that will make sense to and be of value to students who are at the bottom end and at the top end of the continuum. Okay?

All right. So just to sort of position then what we're talking about, the performance gap, achievement gap, whatever, this is the way we think about it in the work we do. If you look at the horizontal or the, yeah, horizontal axis, years in school, look at the vertical axis, skills, and what we assume, whoops, that came out a different color, as kids go through school, one year of school, one year of skills. Don't we assume that? Three years of school, three years of skills. Okay?

So this straight line here theoretically represents, what? Normal achievement. Right? Okay. Now, watch. There's going to be another word that's going to join the skills word up here. Did you see it? Demands. Now watch the blue line. Did you see the yellow on top of it? Okay. Now the reason I'm pointing this out is the following. If students pick up skills at the predicted rate, they are then in a position to do what? To respond to the demands, right? They respond to the demands. Hence, schooling is basically a successful experience for them.

All right. Now let's take a look at another grouping of kids who go through school and don't quite pick up skills at the predicted rate. So we have the gap that starts to develop, right? Now interestingly, and this is based on a study that we did a few years ago. We find that by the time kids hit about fifth or sixth grade level, their acquisition of skills tends to plateau. Have you experienced that in some of the work that you've done?

But what is not plateauing? The demands are not plateauing. Hence, that is the gap. It's the gap between where their skill is and the demands of the curriculum, and of course, other kids, their peers are performing on the blue line and they feel that, don't they? They sense that, of how different Jason's performance is from mine. And that just, for many of these kids, they may not show it, but it eats them alive inside. They feel their failure, and they're reminded of it period after period after period. And hence, the emotionality aspect of this all comes into play.

Well, just to put some numbers on this, let's take a look at this slide. If we have a student who's in the ninth grade along the horizontal axis here, that's where he's placed, but he happens to be reading at the fifth grade level, so we can see where he lands on the red curve, right?

So if we want that student to be reading at about grade level upon graduation, how many years of skill acquisition must be or she pick up in a year of school according

to that? Two and a half years per year in school. That's a huge mountain to climb for the most capable of kids. Okay? So it just underscores the magnitude of the challenge that we're looking at.

It also underscores, at least to me it does, that when we're looking at the interventions we're doing, are we building into them and are we ensuring that we are using, what was on this slide as an advanced organizer, high leverage teaching practices? Every moment of instruction really has to be yielding some benefits. How effectively are we using the instructional time that is available to us? Because the sand is running through the hourglass, right, real quickly.

And I'm going to share with you some data that we've been collecting about how we are using our instructional time, and we're going to take a look at some of the instructional practices that we're using, and here's the exciting work, the exciting thing. There's a lot that we have learned in recent years about some of these high leverage teaching practices that really yield some positive outcomes.

And I'll just give you a little forecast on one, okay? We're going to be talking about it in a little more detail later on. The notion of feedback, okay? We did a study, Frank Kline in our center headed this line of work up. But we're looking at feedback, you know, if a student does a paper, turns it in, and one way of giving feedback, got this right, this wrong, this wrong, this right, this right, and so forth, and give it back. They have knowledge of right and wrong. Right? That's one form of feedback, and it can be partially valuable.

Then we saw how effective is that in really closing the gap? And we found it had a little effect, but very little, quite frankly. Then we built in what we called elaborated feedback, okay, in which we basically, after we would go through and we'd grade a student's paper, we'd sit down with them and say, hey, look. Out of these ten problems here, you missed six. Okay? Now, before you get discouraged, let's take a look at it. Of these six that you missed, actually, three of them can be grouped together and the other three can be grouped together, so there's really two mistakes that you made here. Okay?

Now, we're going to take one of these, as represented by these three problems. Let me do a little model for you in terms of how this should be done. So you do a little mini model. And then you have the student set a goal for what he's going to do next time, and paraphrase back for you how he's going to do differently on his performance, and then you have him do it. Okay? So a little mini, so you categorize the errors, you position it for the students. You do a little mini model, have them paraphrase back to you, set a little goal.

You know what it does for the number of practice exercises you need? The number of practice exercises that are required to get that student or those students to mastery is cut in half. Okay? By giving regular feedback, we found it took about 10 to 11 repetitions or practice trials. Do this, it got it down to four to five. Now that's what I mean by using high leverage, so that we really are condensing this thing. Okay, so we'll expand on that in just a little bit.

Okay. What do we know about these kiddos then? Here's a study that we did. We just completed this about 18 months ago. And there's a lot been written in the literature about struggling adolescent readers. But we found that, we started to question it. Based on what we were experiencing with kids and what we saw, we said,

well, man, this is not what we see. And we said, is it Kansas, is it the water, you know, what is it?

And so, because here's what the literature said, and I'll bet you've read some of these articles. It says, struggling, among struggling adolescent readers there's only a small portion of them who have word level difficulties. And they estimate that between 5% to 10% percent of them. Did any of you read that? And the bulk of the problems are where?

## [Simultaneous discussion]

**DR. DESHLER:** Comprehension. Okay? So we said, is that, that's not the way it is in Kansas. And so we did a study, and here's the way we did the study. We went into ninth grade, and this is a highly diverse school, and we selected about 100 kids. You know, you take the Kansas assessment test. It has five groupings in it. Does Pennsylvania, how many does it have? We have exemplary, sort of exemplary, proficient, basic.

# [Simultaneous discussion]

**DR. DESHLER:** Four? Okay. So we have five, okay? So what we did is we took about 100 kids at each level. Then we administered to those 100 kids at each level a bunch of reading tests. In reading accuracy, you can see the tests listed here, reading fluency and language comprehension. Do you see them going across the bottom here? Okay. So we, because we wanted to see, what do the kids look like.

Then what we did is, and I'm just showing to you those who are on the lower 50<sup>th</sup> percentile, below the 50<sup>th</sup> percentile and down. Actually, it's about the 40<sup>th</sup> percentile and down. Well, here's what we found in this 150 and 100, this is a standard score of 100. Okay? So this is what we found. So this is telling us, first of all, that the kids are varied, right? There's differing profiles here.

But watch this. We found that 80% of those struggling learners fell about one standard deviation or more below the mean, and look it, on the reading accuracy and reading fluency how they're down. Okay?

So for us to say it's just reading comprehension and we don't, we can ignore this, I think is an assumption we need to test, to make certain that the kids that we're working with don't have these kinds of problems, because we're just going to frustrate the kids and frustrate ourselves if we focus only on language comprehension or reading comprehension.

Questions on that? What questions, reactions to that do you have on those data?

WOMAN:	
DR. DESHLER:	Pardon me?
WOMAN:	

**DR. DESHLER:** Does that make sense? Have you sort of experienced that?

WOMAN: ...

DR. DESHLER: Have you? Yes.

**WOMAN:** Do you have . . . similar, like . . .

**DR. DESHLER:** Yeah. As a matter of fact, we've got a couple articles on this. So if you have an insomnia problem.

WOMAN: Great . . .

**DR. DESHLER:** Yes. Could you just make note of this so that I get this to you so that it, so I'll be giving it to Wendy and Laura, and then it will get put up. Is that okay?

WOMAN: Fabulous.

**DR. DESHLER:** Great. Is there another, yes.

**WOMAN:** You could actually find that in our high school. We did some reading assessments on a variety of kids, and we . . . that people thought were either unmotivated . . . or had comprehensive problems actually had some . . . of other problems.

**DR. DESHLER:** Interesting. Thank you. Yes.

**MAN:** . . . of what the colors of the various . . .

**DR. DESHLER:** Yes. Okay, thank you. Yeah. The question is what are the colors for the various profiles here, right? And I'm taking this graph out of context. What we did was an analysis on the data to see if, indeed, these groupings are separate one from another. And we found that, indeed, we have five separate groupings. And we've put an arbitrary name on it, which is somewhat, it's really immaterial.

I think what's important is to look at, you know, how they, they tend to be down in certain areas and so forth. But the article that I'm going to make available and put up will describe each of those. Okay? Thanks. Other questions. Yes, sir.

**MAN:** I'm a math and science . . .

DR. DESHLER: Uh-huh.

**MAN:** . . . talking about the comprehension . . . vocabulary . . . and to me, I don't see a real difference . . . because it seems like they emphasize vocabulary, and you just said, well, it's not only vocabulary . . .

**DR. DESHLER:** Yeah. Well, I'll tell you this. We would never de-emphasize vocabulary in secondary grades. I can't envision a circumstance that we would, because it is so closely tied to the content we're teaching kids. I think what this is just telling us is that the number of kids that are having difficulty here, they're really going to have difficulty accessing the text that has that vocabulary in it, unless we really take care of addressing these issues.

**MAN:** ... how the ... learning? I mean ...

**DR. DESHLER:** Yes. Great points. You know, kids may have their, often their spoken vocabulary, listening vocabulary is higher than they're reading vocabulary. Yes. Yeah. And just, because I may not come around to saying this again since we're talking vocabulary here. Are any of you familiar with the work that Catherine Snow and some of her colleagues are doing on word generation?

If you're not, I'd encourage you to go to the website wordgeneration.org, wordgeneration.org. Some very, A, it's just a really well-populated website, just great resources there. And it's a rather interesting program that they're working with, with middle school kids. Other questions in this?

Okay. And just, you've seen the . . . business, but just by way of reminder, look at these below proficiency level of, you know, 4<sup>th</sup>, 8<sup>th</sup>, and 12<sup>th</sup> graders, and below the basic level. So over 30% of, only 30% of secondary kids are reading proficiency and above. So it's not as if this stuff is just for a small portion of the kids. And many kids of color struggle in particular.

Now I hasten to emphasize, that doesn't say that's something inherent to them. That's tied to the schools and so forth that they tend to be assigned to or the, yes, sir.

MAN: . . .

**DR. DESHLER:** The graph one?

MAN: ...

**DR. DESHLER:** This one? Yeah. And by the way, these slides are, they're on the website. And but you know, remind me I'm going to send you these, because I've jiggled it a little bit. Okay. But these here, they're all on the site for you, okay?

Okay. So now enough for the students. Let's take a look at the curriculum side of things. Take a look at this little graphic here. And just take a moment and read it.

You glad you ate breakfast before you took on that one? It's pretty demanding, isn't it? Yeah, pretty demanding. Okay. So I just wanted to give us, have a shared example in mind as we just stand back briefly and take a look at what's different about secondary text. How do they, how are they changed? And the way in which we've often looked at text or thought about text is in terms of readability or a Lexile. Right?

Well, there's some other ways to look at text in terms of language structure and so on. How many are you familiar with Coh-Metrix? Okay. I put this into Google, the eighth wonder of the world. What would we be without Google? Okay, put in c-o-h dash m-e-t-r-i-x, Coh-Metrix. And what Coh-Metrix is basically is a software program

that's been developed by McNamara and colleagues at the University of Memphis, and it works like this.

You take a photocopy of a reading passage, and you scan it through. And they have software that will give you 62 indices of the language structure and how that paragraph or that passage is put together. And more than you'd ever want, but here's some of the things that we're learning through this process. And you know, many of these texts are becoming longer. More sophisticated learning strategies are required then to get through the assignments. In other words, strategies we may have taught the kids that may have yielded something at the elementary level, not so now.

Secondly, good reading stamina is required. Boy, this is a big one. We've, back in the early '90s our research center got an assignment to with the student athletes at KU, the struggling student athletes. And boy, we found that, and we followed them around the class. We wanted to see what are the classes they're having to take, what is required. And we'd sit in the back and sort of observe them.

And they'd start out, you know, just great. And about two-thirds of the way through the class, they just pooped out. They just, you know, on here they did herky little tasks on the football field, but they just pooped out in the classroom.

Word complexity increases. Dense technical vocabulary. So this is where the word recognition thing comes in. If they can't do this, they just flat out skip over these words, and these words carry a lot of meaning for the text. More academic vocabulary is required, and so kids need instruction in pronouncing and segmenting and so forth, if it's to be a part of their spoken vocabulary or listening vocabulary.

The sentence complexity increases. A longer sentence must be parsed automatically for fluency. And it's not just a matter of reading individual words as we think of fluency in those terms, but it's parsing the sentences. And they need to recognize and use simple cohesive devices and connective words to understand relationships. You know, as the sentences get larger, these words, but, if, or, that, they imply a boatload of meaning. Right? And you know, how do they focus on that and can they make sense of it?

Structural complexity increases. Elementary, the structures are signaled explicitly. Now it's pretty clear what we're covering, what's coming next, blah, blah, blah. And one relationship generally is explained at a time. But when we get into high school, the structures aren't necessarily clearly signaled for the kids. And several logical relationships sometimes exist between ideas, and the interrelationships from one section heading to the next to the next, in other words, the big picture is oftentimes not made explicit.

Now kids who are good readers, good comprehenders, can put those dots together. Those without can't. So it tell us something instructionally what we might need to do to help close that gap or build in some compensation.

Interestingly about graphics. Elementary, generally texts can stand on their own without graphics. Now they're filled with graphics often, with pictures, but if you just look at the text without graphics, they often can stand on their own. But in high school, graphics are critical to understand the interrelated ideas or to synthesize information across sections.

Now, we've done a fair amount of research on the ability of struggling learners to navigate graphics. And what do you think we found? They really struggle with that, you

know, how to, you know, make sense out of it and how to relate it back to text and so forth. And then the conceptual challenge increases. Abstract concepts relying on sophisticated knowledge and previously learned concepts, and just concept notion.

And so you're going to see, I'm going to cycle back. These things that I'm pointing out here by way of defining the problem, I'm going to cycle back to these when we're talking about the nature of interventions in Tier 1 and Tier 2 and Tier 3 kinds of programs within a secondary school. So it's important that we see that what it is we're teaching is linked to the problems.

And the reason I'm so big on this demand business is for years, especially in special education, and those are my roots. I come out of special education. If a kiddo had a problem, the way in which we largely defined that problem was in terms of the kid. Right? We would give them a big battery of tests and say, here's what's wrong with you. Okay? And that's, it is important for us to understand, you know, where those peaks and valleys are and things that need particular attention instructionally, but it's equally important for us to understand what are the demands of the curriculum.

Both those things, kid characteristics and curriculum demands should inform instruction. That's why I'm spending just a little bit of time going through characteristics and demands. It's sort of the backdrop against which we're going to look at instruction.

And then texts vary widely across content areas. We're going to look at this in a little more detail when we get down to some of the interventions. But each content area demands a different approach to reading, thinking, and writing. For example, what is required for evidence in science versus literature versus history, you know? A journal entry is accepted differently and viewed differently in one discipline than in another. You know, different details are valued across them. Different values are assigned to the precision of reporting and so on.

Now, it's very apparent to us. But for kids as they move from period one to period two to period three, they don't get that unless we explicitly make them aware of it. There's a vital role that can be played within the various discipline by the teachers to really make kids aware of this, and to just point it out to kiddos. And if we do this consistently across the grades, boy, it makes a difference.

They need to be able to cope with primary sources. You know, increasingly that's becoming the thing. Publishers are coming out with boatloads of those things to accommodate the texts.

Okay? But these are some interesting data. You know, I've sort of been proud to tell you about the problems. Look at these low profiles here and look at all these demands of the text and so forth. Look at these data. It's a good thing to end our little session on a positive note. Okay?

We studied, in that same study where we did the profile, we came up with the various lines on the reading business, okay? We asked the kids some questions on hope. How hopeful are you? Okay. And we used Rick Snyder's Hope Scale. If you're not familiar with the work that Snyder has done, you might be interested in looking that up. And you spell it s-n-y-d-e-r, s-n-y-d-e-r. He is one of the leading researchers on hope. He passed away a couple of years ago. He was at the University of Kansas. Marvelous person.

But we used his scale, and the scales were available. He developed one for children and one for adults. The nice thing about it, they're six questions long. Okay? It's an easy one to give to kids, just to see what is their level of hope. And over the course of a year or a semester, has their hope gone up as a result of their time with you in your class?

Okay. So what we did is we asked the question, what's the difference in the level of hope between poor readers and good readers? Okay. Now the Hope Scale, there's three scores, a total score, and then there's two parts of hope that he looks at. Hope is the goals you set, you know, what you envision you can become. That's agency. Okay? The P score, pathways, is you can set these marvelous goals or visions, but do you have the step-by-step strategy to get you there? Okay. And so those are the two dimensions of it.

Now let's look at the data. Struggling readers, proficient readers. What's the difference? How many of you would have predicted that? In spite of what they experience, deep within them they are still hopeful. That is amazing. And I'm going to show you two other pieces here that I think are very significant.

We used also in this study across all the kids, we used John, a modification of John Guthrie's Motivation for Reading Questionnaire. And I'm not going to go through this, but I want you to just scan it. Now it's on a scale of one to four, with four being the most positive. Okay? So you can see, you know, just scan through those. And what conclusion do you draw?

MAN: . . .

DR. DESHLER: Pardon me?

MAN: ...

**DR. DESHLER:** By and large, they're pretty equivalent, aren't they? Would you have predicted that? Would never have predicted that. One other piece of evidence. This is not from us. This is from some research that was conducted by Melissa Roderick and colleagues at the University of Chicago, the Consortium for Schools in Chicago, the big, they do some great work there.

You know, we hear about the performance gap. Have you heard about the aspirations gap? You heard about that, the aspirations gap? The aspirations gap is what's the gap between what they aspire to do and the skill sets that they have to reach their goals.

Okay, now let me make this easy for you to understand. Back in, we have three sets of data that we're looking at here, 1980, 1990, and 2002. Ninth graders were, tenth graders were asked, percentage of tenth graders who expect to attain a bachelor's degree or higher. Okay? So if we look at the, let's look at the total right here. Let's just look at this one scale here. 1980, 40% of the kids in Chicago, tenth graders, strugglers, said they aspired to or felt that they could, expected to get a bachelor's degree or higher. In 1990, it went up to 60%. In 2002, it went up to about 80%. Would you have predicted that?

#### WOMAN: ...

**DR. DESHLER:** These are the, primarily the strugglers is who it is, yes. These are the strugglers. Now if we, I took it out. I should have left it in now. Another piece of data from Chicago to show you what happens, for 100 kids who start, take 100 ninth graders, okay? Let's see, the number who graduate is around 54. Okay? The number who get into college is about 19. The number who graduate from college is six. Okay?

That is the aspirations gap. You see, they believe, we've been successful in making the pitch, more education is important. They drunk the Kool-Aid. But you know, they don't have the, in the hope business, they then, they're hopeful, they set these big dreams, goals and so forth, but do they, where's their pathway score, their strategies and skill set to get there? It's not there. Okay.

So you know, to me, and we'll end with this, we'll take a little break, that's hopeful. Boy, I'd put that, these last three slides as a backdrop. This is something for us to really bear in mind as we're working with these kiddos, and adolescents on the outside, most of them don't give you this signal, do they? No way. But important to do.

So let's take about a ten-minute break. Would that be okay? So look at the big hand on your clock and.

## [Break]

**DR. DESHLER:** Why don't we get started? That was the best part of the morning, wasn't it? Steve made a great observation. So do you remember this one, the Motivation for Reading Questionnaire? Great. Steve, why don't you, would you mind sharing what you did with me? That was great.

**STEVE:** . . . I was just looking at the left-hand column and the right-hand column, and the left-hand column seems to be the hope factor. They're not actually reading. The reading question is on the right-hand side, they're actually doing some of the reading. And I think there is a bigger discrepancy in the right-hand column than there is in the left-hand column. So it seems like the hope and want is there, but the practical aspect . . . a little bit more.

**DR. DESHLER:** Yeah. Great observation. Thank you for sharing that. That's great. Okay. Any questions, comments, things that over coffee or a urinal or something that came up? Okay.

WOMAN: We have that . . .

**DR. DESHLER:** You have that. Okay. Now so we've been taking a look at some of the descriptive, sort of what are we starting to learn about the kids, about the curriculum and so forth. Now let's move to what should we do about it. Okay?

A sure to fail response is this, which means, translate that for us.

**WOMAN:** Ignore it.

DR. DESHLER: Huh?

**WOMAN:** You have to ignore it because you have a blindfold.

MAN: ...

WOMAN: ...

**DR. DESHLER:** That's a good explanation. Yeah. Can't do it alone. In other words, if we've got a literacy problem, oh, that's the literacy coach or that's the supplemental reading teacher or that's the elementary teacher's fault or, you know, whatever. We can't. And that's one of the big, big challenges we've got of looking at RTI broadly speaking at the secondary level, is how do we get all hands on deck and, you know, try to get more than one of us and, ideally, all lined up. I mean, could you ever envision a secondary staff like that? Not if we could all just get on our horses at the same time.

But that's something that we really, because of the fragmentation issue, because of the shortness of time issue, because of the diversity of content issue. Math text and a science text and a literature text are so dramatically different that we can't just say, okay, what takes place in the supplemental reading class or, boy, that history teacher does awesome things in terms of a reading apprenticeship with the kids, they'll be taken care of there. We need to be having it taking place everywhere.

Now, I want to say this right upfront. Now I'll dive into this deeper in a little bit. In no way would I ever say, and this is said in the literature but I disagree with it, every teacher is a reading teacher. I disagree with that. I think if you're a science teacher or you're a social studies teacher, boy, that is your major calling. I mean, to do that and to do that well requires your full energy. And if you're a reading teacher, a literacy, to do that and do it well requires the full.

Now, with that said, in a little bit I'm going to make a point that there are things that can be done literacy-wise within each of those contexts that can be extraordinarily powerful, extraordinarily powerful, that a science teacher, math teacher or whatever can do. And if they do it, it's not taking them out of their fastball lane. They're dealing with their content, but they are periodically taking some time to point out such things as, here's how the text is structured. Or, hey, watch me. I'm going to do a little model of this. This is how you might be thinking about it. Or you know, hey, let's push the pause button here and let's each think in our minds a little paraphrase of what we've just read and talk it to our neighbor.

Now, it's not a big disruption of what's going on, but we are modeling some how to learn things and pointing out to kids, yeah, I'm teaching you science but I'm also interested in how you learn science, and I want you leaving this class with a body of science content and I want you leaving this class better able to navigate science information. Okay?

And basically, I'm going to be teaching you how I, as a scientist, do it, how I think about that stuff. And how I, as a literature person, think about narrative text. And they're different. And if we have those conversations with kids, we're not getting out of our area, but, boy, is it contributing to the moving the literacy needle. Does that make sense?

Okay. So the bottom line of that is this. The only way that the needle moves on adolescent literacy is through an integrated school-wide approach, I'll be talking about that integrated notion in a bit, in which everyone owns part of the problem, and believes big changes and achievement can happen.

If I had to choose one yellow highlighted word out of that thing that makes a difference, well, I'd ask you. If you had to only choose one of those yellow highlighted words or phrases, integrated school-wide approach or everyone owns or believes, you can only choose one, what one would you believe, or choose?

[Simultaneous discussion]

**DR. DESHLER:** Everyone owns?

[Simultaneous discussion]

DR. DESHLER: Believes.

[Simultaneous discussion]

**DR. DESHLER:** This other one is such a mouthful, no one knows what that means. No one chose that. Yeah. Obviously, I think they're all important because I put them there. If I had to choose one, if I had to, I guess I'd put on the belief thing. Because if you don't believe it that these kids, regardless, you know, how they are manifesting or demonstrating performance right now. If I don't somehow believe that we can move them, I'm not going to care about owning it or participating in this.

But beside the point, this is bottom line what we're talking about here is we really, and this what our work to this point has told us is, and quite frankly, this is where did our, have done our work. That's what you get funded to do work on, you know, coming up with some programs and so forth. So that's where we do the work. But by golly, we found that we come up with great things here.

But if we couldn't get people saying, yeah, this is a part, I own a part of this. In order for my kids to excel and stem or to really fully appreciate the beauties of art and literature and so forth, okay? In order for that to happen, I've got to own it and I've got to believe it. So all those things are important. So we'll come back to that. That's sort of a little backdrop.

So some of the pieces then as we're starting to put together some part of the solution. First piece, and I'm going to be talking about it in two pieces of the puzzle is the content literacy continuum. And we're going to spend, this will probably take us to, oh, I don't know, no, it won't take us to lunch. Couldn't last that long in this.

So what's content literacy? Here's how we define content literacy. It's the listening, speaking, reading, writing, and skills and strategies needed in each of the academic disciplines. So our focus is on, you know, just putting kids in a position where they can benefit from what's going on literacy, or what's going on within the disciplines. That's why we use that term content literacy.

So it's not just reading. It's the listening, speaking, reading, writing. And by the way, if you've not seen it, it is free, strongly recommend it. The new report just released

about three weeks ago by Steve Graham and a colleague, starts with an H, someone may know. It is called *Writing to Read*, *Writing to Read*. And if you just put that into the Web, you can get a free download on it.

It's a wonderful report from the Carnegie Corporation and the Alliance for Excellent Education. And basically the case is made that if, of the, how those two things, writing and reading, are connected at the hip. And if we want to move one, let's attend to getting kids involved in the other and vice versa. And that issue has really not been attended to, and I think you're going to be seeing a lot, lot more in that area.

Okay. So how do we proceed? This is, and so I'm getting down to the nuts and bolts, what we do when go into a school. And we're going to try to put something in place, here's what we do. The first thing we do is we get a profile of literacy performance of kids in a school. Now, the variety of places that can come from. If we have data that is already available, that's what we use. I don't know what kind of data you get from the Pennsylvania state assessment. Is it the kind that tells you where kids are in certain reading measures and so forth? Does it give you that kind of detail?

WOMAN: ...

DR. DESHLER: The number of kids who are decoding and so forth? It gives you that?

[Simultaneous discussion]

DR. DESHLER: No. It tells you the number who are failing.

[Simultaneous discussion]

**DR. DESHLER:** Okay. Okay. So again, we want to use what is available. If you've done other formal tests, if you have MAPP testing, a lot of districts have used that. If you've used AIMSweb or any of those instruments, use what you've got. If you don't have those things, then what we want to do is, oh, piddle, I don't know why that's there.

What we want to do is screen for these things on the reading side. We want to figure out how do kids decode, what's their fluency, comprehension, and vocabulary. Now, how do you do that? A couple practical suggestions on what we're using right now, and these aren't certainly the only ones, but we've been using them in some of the schools around the country.

We've been using, to get at reading, to get at vocabulary and comprehension, to get at vocabulary and comprehension, we either use the GRADE, how many are you familiar with the GRADE? A lot of you are. Okay. Now this is a group-administered test. It does give you vocabulary and comprehension measures, and it takes, they say an hour but my experience is it takes a little bit more than that. Or another one that we've been using is the Gates McGinty. It also gives you vocabulary and comprehension. It's about an hour, group administered. Any kind of screening you do, it's got to be group administered.

Now, would you administer this to everyone? We typically don't. We'll take, you know, kids who, by teacher nomination or whatever, are, you know, struggling or we

may look at some state cutoff point. But we want to figure out what do the kids who are struggling, what do they look like?

Now, the big kicker on a screening is how do you get at word rec and fluency? Because most those measures are what?

[Simultaneous discussion]

**DR. DESHLER:** They're individually administered. And so from a screening standpoint, that's just, you're dead in the water with the size of secondary staffs, right, or schools. So what we've now come across and have been using the last couple of years is a test published by PRO-ED. Familiar with PRO-ED?

[Simultaneous discussion]

**DR. DESHLER:** Okay. If you want to go to their website to get this, the website is proedinc. So proed, just no punctuation or anything, it's all one, p-r-o-e-d-i-n-c. Be sure to up the i-n-c in or you'll get a room company or something. I don't know what it is. Dot com, okay.

And then just put fluency in there, and you'll get, they have two fluency measures. The Test of Silent Word Reading Fluency, that's one. The one that I really should have up here is the Test of Silent Word Contextualized Reading Fluency. Okay. Now let me explain what this test is. It's cleverly put together. Has anyone used this? Want to describe it to us?

**WOMAN:** We call it the slasher . . .

**DR. DESHLER:** The slasher test, that's right.

**WOMAN:** And you have to read along . . . between the words, and the students have to decide where one word ends and the other word starts . . .

**DR. DESHLER:** Right. Yeah, so envision. They get a paragraph, and that's why the contextualized one is a paragraph that makes sense. The non-contextualized one is just a bunch of words. So we just lean toward the contextualized one. And was said, you give kids this paragraph. You give them a pencil and say, you got three minutes to find as many words as you can. Kids like it. It's sort of like a videogame or something. Right? Three minutes.

The correlation, so what you get is a fluency measure there, but the correlation between that score and word recognition is quite high. It's in the 80s. So for screening, that's what you need, right? You just need to have some indication.

There's also a relatively high correlation between that and vocabulary and comprehension. So if you really have your back against the wall for screening, and oftentimes we are short of time, you know, you might just rely on this one alone to just do screen, to get a sense of what does the profile of your school look like. Now, why is that important?

What are the implications of a school like this, Jefferson High School. And we know that we have 5% of the kids with word rec problems three years or more below. Have 22% of the kids with comp problems three years or below. Now if we had that school, and then we have Prairie View High School that has that profile, 27% word rec, 43% comprehension. Now what's the difference? What implications would there be between those two?

WOMAN: ...

DR. DESHLER: Hmm? Would it have anything to do with staffing?

MAN: ...

**DR. DESHLER:** Pardon me?

**MAN:** It . . . the percentage, the percentage of kids in each school that are three years below grade level in each . . .

DR. DESHLER: Yeah.

**MAN:** There's a significant difference between . . . Prairie View is much lower, much . . . larger and . . .

**DR. DESHLER:** That may be an explanation for it, absolutely. What is the implication if we have this from an intervention or instructional standpoint?

**MAN:** It . . . standard curriculum . . . regular textbooks to a bunch of kids in Prairie View, a much larger number of those kids are going to be done before they . . .

DR. DESHLER: Okay.

MAN: . . .

**DR. DESHLER:** So the level of supports that we're going to need here is different than the level of supports here. Right? The way in which we configure our staff here is going to be different than here. The way in which we put together professional development and think of that, it's going to be different in both places. Right? The number of sections of supplemental reading course and so forth that we might put in place is going to vary. So it's important to get a handle on this.

Let me just share with you a little subpart. One of the most exciting schools I've been in the last few years is Falls Church, Virginia, J.E.B. Stuart High School. Any of you visited there, by chance? Maybe you've read about it. This is a school that started just at the bottom of the heap. And Mel Riddile became the principal there and absolutely transformed that school. Transformed it so much that he was named national secondary school principal of the year. He now works for National Association of Secondary School Principals.

But one of the things that Mel did is he did this kind of screening. He said, hey, we have got to have an accurate handle on where the literacy performance is of our kids as they come in. Okay? And then, when he would get this screening, he would also get the Lexile level for each of the kids, and he would require that that be put in everyone's grade book next to every kid's name. Okay. And this was just one part of him bringing literacy into the conversation of everyone within the school, what are we doing.

Okay. So after we do some screening, we have a sense of what does this, what does our population look like here, what are the challenges before us. Then what we do is we ask five questions about the literacy supports that we've got in place within our school. And every school has some literacy supports in place. There's certain things that are there that we can leverage, build upon and so forth. What are they? Okay.

So here are the five questions. And you're going to see that after we understand what these questions are, we're then going to go back, we're going to use those as sort of a point of departure and use that to define various tiers of instruction and intervention. Okay.

So the first question is this. What's in place in core classes to ensure the students will get the critical content in spite of their literacy skills? What's going on? So if you were to take a look at your school right now, can you think of some things that deliberately have been, say, hey, we're going to put this in place within these classes? Or there's a teacher or two teachers or something perhaps you're doing within a content class, a core content class that ensures that the kids get the critical content in spite of their literacy skills. Can anyone share anything that's, yes.

WOMAN: ... the content area teachers also see themselves as ...

**DR. DESHLER:** Okay. They content area teachers see themselves as . . .

**WOMAN:** Often teaching reading.

**DR. DESHLER:** They're, okay, they're teaching reading?

**WOMAN:** . . . instruction . . . content.

**DR. DESHLER:** Okay.

WOMAN: ... the how-to ...

DR. DESHLER: Okay. Thank you. Yes.

**WOMAN:** . . . more of the graphic organizers . . .

**DR. DESHLER:** Okay. The use of graphic organizers? Okay. Thank you.

**WOMAN:** We . . . kind of a guided outline, so . . . special ed kids have a little more . . .

**DR. DESHLER:** Okay. Some guided outlines that students can use to help them keep track of the content. Yes, sir, or ma'am.

**WOMAN:** . . . question to start out.

DR. DESHLER: Oh.

**WOMAN:** Piece of literature.

**DR. DESHLER:** Framing a big question that the discussion and so forth is aiming toward. Great. Thank you. Sir.

**MAN:** . . . video . . .

**DR. DESHLER:** Great. Well, and just get that content and that information in, other than the printed word, right? Yes. Yes, sir.

**MAN:** We're starting . . . co-teachers to help students . . . getting it . . . more than one time . . .

**DR. DESHLER:** Okay, co-teachers. And who's the arrangement on the co-teachers? A discipline teacher and a subject matter teacher and?

MAN: . . .

DR. DESHLER: Okay. Good. Thank you.

MAN: ...

DR. DESHLER: Good. Others. Yes.

WOMAN: ...

DR. DESHLER: Okay.

WOMAN: ...

**DR. DESHLER:** To the text, to the content. Great. Okay. All right. So you can see that there's a variety of things that are happening, you know, to have this occur. And we'll take a look at some others in just a little bit, but thank you so much for sharing those.

Okay. The second question then that is important to ask is, are powerful learning strategies imbedded in courses across the curriculum? Now, when I say powerful learning strategies, when I say the National Reading Panel report, does that ring a bell with some of you? More so than others. Some not a good bell.

Okay. This was a, truly has become a classic report that was released in the early 2000s, 2002 or something, forgot. But basically what it was is a, the Department of Education commissioned a panel to review the empirical literature to identify what are the, what reading behaviors do we have the most evidence behind. Okay. And if we focus on those things, we have the best chance of improving achievement.

Well, one of the things that came out of that is there are some powerful findings on strategies, and some of the high leverage strategies that emerged out of that report were such things as imagery. That is, having kids, teach them how to form an image of what it is they're reading. Okay. And to actively create an image, and that enhances comprehension.

Another thing that they found was a high leverage strategy was summarization. That is, if kids will periodically push the pause button and go back over material that they have read and summarize it, paraphrase it, put it in their own words, talk about it, manipulate it, transform it, summarize it, that enhances comprehension as opposed to just plowing through it. Okay.

Another one that they found was a high leverage strategy is what they called comprehension monitoring. In other words, if as you're reading along, that you basically are aware of the fact as a reader, I'm going to be checking myself. And if I'm not getting what I'm reading, I'm going to go back and try it again, or I'm going to ask someone a question about this, or I'm going to seek, in other words, but I'm going to monitor how well I'm comprehending things. Okay. So those are some high leverage strategies.

Now what we find, oh, sir, yes.

**MAN:** And I think it's important, at least for secondary . . . is that with those ten high leverage strategies they put out, that they also, you know, help improve . . . as well . . . and I understand. I think a lot of times we look at the word summarization and we think it just means one thing, summarization. Summarization just doesn't have to end but it can be throughout the lesson.

DR. DESHLER: Yeah.

**MAN:** And that's, and that's important. I know that the . . .

**DR. DESHLER:** It's a very good point. It's an excellent point.

**MAN:** ... levels. Yesterday the ... when it came to this type of thinking and who's here to help us, and a lot of what we're seeing our group ... has the necessary tools to know these high leverage strategies ... help ...

**DR. DESHLER:** Thank you. Thanks for sharing that. And the point you made about it's not just at the end, but it is throughout, very important, so very important. So, and then if we find this, just sort of the supercharged effect is this. It's one thing for a teacher in a class to teach kids model for, set some expectations for these strategies to be used. Okay.

You supercharge the effort if it's done across classes. So in other words, when a student goes from this class to this class, oh, my word, this teacher's asking

summarization and teaching us the same three steps to follow. How did they get together on this, you know? It's a conspiracy. And when that starts happening across classes, whoa.

We've done some studies on this. Powerful. This is how you start to break down the fragmentation issue. Okay. And you know, this is one of the, if you will, low response cost tactics that a staff can take on. For example, we've talked earlier about the importance of vocabulary. Right? All right. What if we as a staff, a whole staff were to say, hey, this cuts across all of our classes. Can we agree upon using this particular strategy, vocabulary strategy?

Okay. And there's a host of them out there. The LINCS vocabulary strategy, the word mapping vocabulary strategy, and so there's a host of them. Okay? Can we agree upon or upon two of them? And here's how we'll do it. If we could have, how about if we have the social studies department launch this? In their classes, they will teach the strategy. They'll introduce it to the kids. They'll tell them what it is. They'll do the initial model. Then when the kids come to all the rest of your classes, anyone not social studies, you review it, you set the expectation, this is the way we're going to do it. This is our way.

Now you can maybe have, and if you have some other magical ways the kids learn vocabulary, you know, add to it. But if you'll just, you know, reinforce that to kids, wow. That's what we're talking about here.

Third question. What happens for students who know how to decode but can't comprehend well? Okay. There are several kids, man, they can break the code. They'll fool you, you know? They just babble out those words real quickly, but they don't have a sicum(?) what they're reading. They just don't know. So what do we do for those kids? What's in place?

Fourth question. What happens for those students who are reading below the fourth grade level? And why do you think we establish the fourth grade level? What's that?

**MAN:** The frustration . . .

**DR. DESHLER:** Okay. Yes, thank you.

**WOMAN:** . . . the shift where they stop learning to . . .

**DR. DESHLER:** Yeah. There's that big shift, isn't there, between third and fourth grade. The assumption is, by the time the kids have made it through the third grade level, if they've done so successfully, they've picked up sufficient decoding skills so that now they can deal with the content. Yes, go ahead. You were going to add something? We really want to hear it.

WOMAN: ...

**DR. DESHLER:** Great. Okay. Thank you. Okay. So, yeah. And if we have kids who have not made it over that third-fourth grade hump, we got problems. They got problems. And so what are we going to do so that that can happen quickly? Because

for every moment we're spending doing that kind of instruction, we are not spending time doing instruction in the disciplines, okay, or in higher order strategies that they need to attack the disciplines.

So we really need to have a good way to address this. And boy, I'll tell you. The reason we do the screening on it, and some of the schools we're working in, for example in Detroit, you know what the graduation rate is in Detroit? Twenty-five percent, 25%. So we have huge numbers of kiddos who hit secondary grades don't have these skills. Okay. So the way in which we man up for that is quite different than the other.

Okay. And the final one is what happens for students who have language problems? Now that can be ELL problems or what every school has is a certain number of kids who don't have the underlying metalinguistic behaviors that are required. And this is where we can really capitalize on the expertise of speech-language folks. One of the most underutilized set of professionals in secondary grades and, oh, what a loss it is to us when we don't capitalize on their knowledge of language. Okay. And not that they own all of this problem here, but, boy, can they inform this as well as these others.

So those are the five questions. What question do you have about the five questions? Yes.

**WOMAN:** . . . backtrack a minute.

DR. DESHLER: Sure.

**WOMAN:** You talked about a reading report that talked about the high level strategies.

DR. DESHLER: Mm-hmm.

**WOMAN:** What, I guess, what type . . .

DR. DESHLER: Okay.

**WOMAN:** . . . access and . . . the whole report . . .

**DR. DESHLER:** Sure. It's called the National Reading, put in National Reading Panel.

WOMAN: Okay. Thank you.

DR. DESHLER: Report.

**WOMAN:** National Reading what?

**DR. DESHLER:** National Reading Panel Report. Yeah. That's probably not the formal title to it, but that's, that'll get you there. Google will get you there. Okay, other questions on it. Yes.

**MAN:** Just a comment to that. Ann Kastner, who works with . . . has that also. She serves the . . . and she has the whole strategy. You can break it down . . .

**DR. DESHLER:** Okay.

WOMAN: ...

**DR. DESHLER:** Yeah, you can get it for free.

WOMAN: Okay.

DR. DESHLER: Download for free. Yes, Steve.

**STEVE:** I was wondering. Did we answer number four?

**DR. DESHLER:** Yes. Oh, I'm begging for an answer.

**STEVE:** I'm curious . . .

**DR. DESHLER:** Oh, can we answer number four. Oh, yes.

STEVE: ...

DR. DESHLER: Yes. We can . . .

**STEVE:** . . . answer all . . . I mean, are we just pushing them through?

**DR. DESHLER:** No. We already, that's where we're going. We're going to go to the next slides. You're like Ed McMahon to Johnny Carson. You put up that big thing to move us on.

STEVE: ...

**DR. DESHLER:** Yeah, we're going there. We're going there. Yes.

**WOMAN:** One of the things Pat has is a secondary toolkit, which many of you received in teaching yesterday, but this is also on the PaTTAN website. And one of the documents in there is this high leverage strategy, looking at Marzano's work, Ellis's work. So they're available on the PaTTAN website under Response to Instruction and Intervention, PA Secondary RtII Toolkit. So many of the things that Don is talking to you about are available at the PaTTAN website. Anybody that has question about that . . .

DR. DESHLER: Great. Yes.

**WOMAN:** . . . wanted to ask this question. How many of the schools that we have in here today are learning focus schools?

**DR. DESHLER:** Okay. Did you hear the question? How many schools in here are learning focus schools?

**WOMAN:** That's what I want to know . . .

DR. DESHLER: Okay.

WOMAN: ...

**DR. DESHLER:** Okay. So we have some. Okay.

WOMAN: ...

**DR. DESHLER:** Other questions on this.

[Simultaneous discussion]

**DR. DESHLER:** Okay. Well, let's move on as Steve has requested here. Okay. Once we've asked . . .

[Simultaneous discussion]

**DR. DESHLER:** Okay. Once we've posed these five questions, and again, by posing them, the intent is for a school staff to sit down and do this and to ask themselves these questions and say, what do we have in place? You know, let's build on that. And generally, every school has something in place in some of these areas, not all of the areas. They've not really necessarily thought about the areas, but it's important to do so.

Okay. So then the next thing we do then is we use a content literacy framework to determine an action plan. And so that's where we're going into what the content literacy continuum is. Basically, here's, this is a tiered model, surprise, surprise. But I should point out, the way we think about what is at Level 1 or Tier 1, 2, and 3.

The first is what's happening within content classes. That's the baseline. That's Tier 1, Level 1. And as you can see here, there's two main instructional tacks that we've been working on and that we think are worth pursuing. We've got some encouraging data here that would tell us that it is.

One, are there some, there are some things we can do to enhance content instruction. By enhance content instruction, we mean that you think of a body of content. Not all of it is of equal worth. Right? But a novice learner doesn't know that. They look at it. They're not familiar with it. They don't know how to choose. Okay? So the role, key role of the teacher is, number one, identify critical content and, of that critical content, identify content that is difficult.

Just because something is critical doesn't necessarily mean it's difficult. Okay. The content we want to enhance is critical and difficult content. Now, and I'll go into what I mean by enhance in just a moment. But in essence, it's going to be we're going

to act on that content so that we make it more learner friendly. Okay. So that's one thing that we can do. And I'm going to share with you several ways that we can do this.

The second, becoming a bit more explicit, is to imbed some strategies within our content instruction that are discipline specific. Okay. That you as a math teacher or you as a science teacher, an English teacher use to help you navigate and work through your discipline-specific material. And we're going to be modeling that for kids. We're going to be giving them opportunities to practice it. We're going to be setting expectations for them to practice it.

So bottom line what this is saying, and you're saying to the kids if you adopt this, is I want you to learn critical content in our time together. I want you to learn how to learn content in the future when we're not together. I want you to be an ongoing science learner. I want you to be an ongoing history learner. Okay.

So I'm going to teach how. We're going to learn how in this class. We're going to have conversations about it. We're not just going to talk about history, we're going to talk about how to learn history and how, different things that work and things that work better, things that don't work so well, and having those conversations around. The way to help kids become strategic learners is, and this is really important, is to have conversations about how to learn.

You see, a strategy, learning a strategy can be a pretty technical kind of thing. You know, here's the steps to the strategy, you know, let's learn it and so forth. And the kids can go through that dutifully and learn it. But where a good part of the benefit of learning strategies is to have conversations about how it's working, why it's working. Why do you think it helps? You say it works when we summarize or paraphrase things. How come? Why do you think that happens? And if you engage kids in them thinking about themselves as learners, boy, that's where we want to get to.

Let me ask this. How many of you had an aha moment, for me it was in freshman year in college, when you learned, oh, my word, there are different ways to go about learning, some of which are better than others. Did any of you? I mean, it was me when I was taking organic chemistry, and had been through the first semester with a five hours of D, like in dog. And I said, hmm, I don't think what I did worked too well.

And so I started, did all of you have some, maybe not a D experience, but did you have some kind of experience like that that said, there's different ways of learning? Now, we discovered that because, you know, we have a few more things going for us or that we're not pushing some of the rocks up the hill that some of these kids are. And in order for them to discover this, it really helps if we make it explicit to them and have conversations around it. So that's going to be part of the things here.

So those are some things that can happen in the content class, and we're going to dive into that in just a moment.

For kids who struggle with that or that's not enough, we have, we establish some supplemental classes. And quite frankly, the way we think about RTI, RtII, and secondary schools is we don't have them go through Tier 1 and demonstrate that they don't, can't make it there. If we have ample evidence when they come into like a high school that they are significantly behind and there's evidence that they're failing, we don't have them demonstrate it for another semester. We get them right into the supplemental reading class.

This is one way that we think differently about RTI at the elementary level, than at the elementary level. Now not all kids necessarily do that. But for some, we need to get them right there immediately. Yes.

**MAN:** On top of the core?

**DR. DESHLER:** Pardon me? On top of the core. Yeah. On top of the core, yeah. Yeah. If we have a student who's reading at the fifth grade level, you know, and has been struggling up to that point, they can't lose another semester. Do you know the figures, if a student gets more than one F in their freshman year in college, or in high school what that does for graduation? A kid who doesn't get an F is three times as likely to graduate as a kid who gets one F. And then if you add more than one F on top of it, your chances of graduating just plummet.

So we can't dink around. We need to get there right away. Okay. Yes.

**WOMAN: ...** at risk and ... you would not believe how many parents I have call me to take their child out of supplemental class because the kid did not want to be there.

**DR. DESHLER:** Sure. It's a huge problem.

**WOMAN:** I mean that's . . .

**DR. DESHLER:** No. It's a huge problem, and we've got that, we've got that issue to approach. We've got kid motivation, we've got to hook the kids, we've got to give rationales to the parents. That's part of what goes with the territory. We've got to do that. And if we get, if we're going to, now, there's people who disagree, and I'm sure many in this room would disagree with this tact on doing it. Okay.

If we're going to put kids here, that's a pretty drastic decision. Okay? That's not just a typical class placement. Okay. That is all cylinders, shoulder to the wheel, high expectation. Kid comes out of every session sweating. I mean, we have no time to idle engines there. We've got to get kids out of there, and we've got to close that gap as quickly as we can.

Incredibly, we look at the data on more than we would want, supplementing classes at the secondary level, and they are not that. They are low expectation. They are slow paced. They are unmotivational, and kids hate them, for good reason. Okay. So we've got to look at all those things, and we've got to counteract that. Question. Questions, comments, disagreements, yeah, buts. This is the time for a yeah, but.

**WOMAN:** Is there any research that would give you an idea about how much of a gap you could close using a supplemental class?

**DR. DESHLER:** The question is, is there any research telling us how much of a gap we can close in a supplemental class. Yeah. Some of our research, we're closing three and four years within a year.

WOMAN: ...

**DR. DESHLER:** Three or four years.

WOMAN: ...

**DR. DESHLER:** Okay. Now we're working hard. Kids are working hard. And you have to have the right kind of instructional conditions in place, which we'll be talking about in just a bit. This kind of instruction is expensive. I mean, it just flat out is. You can't make up for eight years or not doing it in one year. And now by saying that, I don't mean that that happens for every kid. Okay. But there's evidence that that can be done, yeah.

WOMAN: I mean . . .

**DR. DESHLER:** Oh, yeah, yeah. Exactly. Okay. So the things that happen in there is intensive skill instruction, intensive strategy instruction. Strategy instruction is happening in the gen ed class, but it's sort of like, you know, there's two ways to be baptized. What are they?

[Simultaneous discussion]

**DR. DESHLER:** Okay. This is sprinkling, this is immersion. Okay? And we let them up only occasionally for air. Okay. And the last one is individualize, and here it becomes more intensive as we come to know what is going on with those kids and, you know, really tailoring what is happening. And here's where the, all the expertise of the speech-language person, the special ed person, you know, this is truly a team effort. What do we need to do with this kid who does, indeed, seem to have some crossed wires in addition to a host of other things that may be contributing to the problem? How are we going to do that?

And so collectively, these things are in place to improve literacy. Ideally, the reason for the big, small, smaller circles is it conveys the number of kids, but that varies from school to school. Detroit in some of our high schools, you know, the big circles are here, which we've got to really turn that balance in a big rush. Yes.

**WOMAN:** When you say on supplemental, how much time are we talking about . . . all the work that you've done . . .

**DR. DESHLER:** Great question.

WOMAN: ... these are all ... kind of curious ...

**DR. DESHLER:** Yeah. Great question. Did you hear that? How much time? I'm going to give you the short answer now and then I'm going to somewhat contradict myself in a bit. All right?

**MAN:** . . . to that time that she's referring to in Detroit, what does their daily schedule look like? Because that was the . . . yesterday. You know, we have our students . . . skill, so what would . . . look like? Is there a block, an . . . block, is there some additional . . . period?

DR. DESHLER: Yeah.

MAN: What have you done that's, what's . . .

**DR. DESHLER:** Okay. We've not had that degree of control in Detroit, only I wish we could. I mean, let me tell you. Last year, they had three superintendents. We are in nine high schools in Detroit. A year ago, not this May, last May, nine were fired. This May, nine were fired again. I mean, the amount of chaos, dysfunctionality, and churn within that, it's just, it is a crime. It is just sad.

But to your question. Let me recommend, and the question if I heard it, are there some creative ways to do some scheduling, configuring and so forth. Familiar with the National High School Center? Okay. Go to their website, and just put in National High School Center. Go to their website, and then put in, looking under their publications, like secondary scheduling or class configurations, that kind of thing. And there's a great document that describes and gives different kinds of scenarios for dealing with what you're talking about. Okay?

Now to the question, how much time. By and large, we find that it's easier to fit within the existing structure so we, generally a period. Okay. But I'm going to come back in a little bit and say if we look just at time and group size, which are the two biggies that we ask about in RTI, right? Okay. That we're missing the boat somewhat. We need to drill a little bit more deeply, and I'm going to give you some things to read and think about there, a new way for us to alter how we think about RTI configurations. Okay.

So in essence, or are there other questions before I go on? Are there, yes.

**WOMAN:** My brother is a science teacher. This is the . . . same thing. This, you know, seemed to have had the average and . . . but where are we looking, and we must have or, you know, the other . . .

DR. DESHLER: Sure.

**WOMAN:** . . . how do we identify and really giving them the opportunity . . .

**DR. DESHLER:** Great question. Great question. And you know, it's an overall problem in American schools. A good friend of mine, who has long since died, he was a director of special education in Kansas City, Kansas schools. And someone asked him, his name was Don Juan(?), Don, you have a problem for gifted and talented students. And he paused. And he said, yes. He said, give us a couple years and we make them pretty normal.

You know, and he was regretting the fact. Okay, let me tell you. Right here, you're going to see that what is designed into our content enhancement routines is

designed to address the needs of these kids. Okay. Not that we totally do it, but when we put this together, we recognized this reality. In every class, we've got that divergency we started the day with, 90<sup>th</sup>, 50<sup>th</sup>, and 10<sup>th</sup> percentile, and we cannot just, we're not about the business of the 10<sup>th</sup> percentile and those below the 50<sup>th</sup>.

It's not the business. Because I'll tell, and we've done research on it. If you come up with knock them to the moon instructional strategies that will move the needle for those lower achieving kids, you know what will happen, and it just focuses on them, it doesn't, and it doesn't make any difference for the high achieving kids? You know what will happen? Those high achieving kids will basically subgroup against the teacher. The teacher will then drop those strategies that work with the lower achieving kids. While they may want to help the lower achieving kids, they're not going to do so at the expense of the high achieving kids. Okay?

So if we want instructional things to happen in a positive way for all kids in that class, it has to, they have to be procedures that will move the level for all the kids, or you will have a procedure that is short term in duration. We have data on that time and time again. And we will not release a content enhancement routine that we do research on until we can document that kind of data. And I'll show you a sample dataset on that in just a little bit. Okay. Other questions? Great, great, great questions.

Okay. In essence then, the content literacy continuum is saying this, those bubbles. Here's what, standing back, what we're saying is this. Number one, some students require more intensive explicit instruction in content, strategies, and skills, in all three of those, varying levels of intensity. In essence, it's saying there's a lot of variety among the kids. Hence, we need to accommodate that. That's one thing it's saying.

The second thing it's saying is this. There are unique but very important roles for each member of a secondary staff relative to literacy instruction. Now the emphasis there is on unique and important and for everyone is involved. Okay.

And then we're saying it also says, while every content teacher is not a reading teacher, every teacher needs to teach students in how to read content. And I think that, or we think that the difference in emphasis is an important one to keep in mind. Because someone who's a science teacher got into this business because they love science and they want to teach science. They don't want to teach reading. And if you got in to do it to teach reading, you don't want to teach science.

And that's what happens oftentimes. In supplemental classes, we end up tutoring science, tutoring history, tutoring this, tutoring that, and we don't have any business doing it because we have no certification in it. So the kids who come there are getting watered down, sort of bastardized content from a non-certified person. So we're violating role integrity, and that's what we're arguing for here is role integrity and keep people in their areas of strength.

So comments, questions on this. Yes, sir.

**MAN:** I was reading fundamental . . . and some others as well, and that is that . . . pushing the system . . . especially the special ed staff, because . . . to get the kids . . . to get the kids moving towards graduation . . . and still go about . . . priorities . . . and reinforce each other for that . . . reinforce each other in that effort. But the outcome for that . . . getting a grade. I'm not sure they're getting much content, but they're getting a grade . . . skills, life skills. And so . . . larger system in question about how do you . . .

DR. DESHLER: Yeah.

MAN: ... alongside the ...

**DR. DESHLER:** Yeah. Very well said. Very well said. It is systemic, it really is. And that's one of the big problems, quite frankly, that we have in changing things at the secondary, you know, you asked about Detroit. We don't, there's, and we've come to the conclusion, I'll tell you, one of my big takeaways when we went in to do that project and it's a part of we're in 40 schools in the greater Midwest, large urban districts.

And one of the big takeaways, we're now on the third year in that effort, is unless we have the, some control over some of those systemic factors to go in and just do the instructional stuff without being able to change some of the other things, we won't do it next time around. Won't do it, because it sets teachers up for failure and frustration and kids and so forth. And there has to be, you have to have some control over schedules. Okay.

It's not, oh, here's one. Get this. January in, I won't name the school, but is in Detroit. January, they had a teacher in English retire who was teaching 11<sup>th</sup> and 12<sup>th</sup> grade English. They had a home ec teacher retire. They didn't, they couldn't get another teacher. So what they did is they took those kids and they put them into the supplemental reading class. Think about that. The supplemental reading class is designed for 9<sup>th</sup> grade students. Taking 11<sup>th</sup> and 12<sup>th</sup> students in English and putting them there. Can you imagine that? I mean, just to throw away, and so if you don't have control over some of those things, it's a, so your point is well made.

Okay. Let me just share with you one sample, no, you know what I'm going, no. I'm going to do this, and then we come back we're going to shoulder to the wheel. Okay. I'm just going to give, because what follows this next little illustration, you need a break first before we do it. By saying that, you won't come back now, I know. Oh, okay.

What this, you can't see it. There's supposed to be a pale green. Can you see that?

### [Simultaneous discussion]

**DR. DESHLER:** Okay. Sort of, yeah. Okay. So what I'm going to focus on now is this part of it, the enhanced content instruction. After we get through that, I'm going to show you several examples of what I mean by that. Then we'll switch and do imbedded strategy instruction. Okay, so we're there.

Okay. Isn't that a cute little kid? That's our grandson, Carson. And that's one of our sons, Todd. Todd's a pilot and he's showing Carson his flight helmet. Todd flies a KC-135, which is a refueling jet. And the cockpit in the KC-135 is this. Now how many of you are pilots? Any pilots here? Okay. All right. So I just need to tell you a little story, and then, and there is a purpose to all this.

A couple years ago I was, Todd was stationed in Utah. And so my wife and I visited here, and he took us to the airbase and took us up into one of these planes, and I sat in the pilot seat. And as I sat there, I looked at all of these dials and, you know, you can see them on the ceiling and all over the place. And I just started to, you know,

sort of freak out, because my mind transported back to when Todd was in middle school. And it was a, ahh, and I thought, oh, man. But I got out of that.

I said, Todd, how do you this? I mean, I was just really getting a little anxious. I said, how do you process all this? And he said, look, Dad. We don't use all these all the time. He said, for example, this bank here, and he pointed to wherever it was, those are the ones we use when we are unloading fuel from our plane to the next. And so if we're not doing that, we don't even look there. And these particular ones we use when we're landing, and so forth. And then he said, we are taught to do a particular systematic scan across the instruments all the time.

And just in that 30-second explanation, the tensions, I could just feel them fall away. Now, why do I share that with you? How is that related to what happens in a content class? Do kids come in there, you know, just sort of overwhelmed by all the dials that are around them and not being oriented to and having their head into that content? So are there some things we can do as teachers to help orient and make sense of that material?

There is, and that's one of our roles as a teacher is to take all that content. Did Todd not sort of enhance some of this for me? He did. Point out what was most important at what point and so on. It wasn't detailed, but it helped me to make, bring some order and make sense out of the content that was before me. And I think it's really no different, in many ways, than when kiddos come into a class.

You know, think of a teenager. Period one is science. Okay. Now, when they're going to school, are they thinking, okay, yesterday in science class we covered this, so today we're probably going to be. Do they do that? And then when they get out of that class and they're on their way five minutes and on their way to English, do they say, let's see, now. What do you think we'll be taught? I'll bet it's going to be this. Do they do that? Not in Kansas either.

So that's our role is to bring kids' minds into the ballpark we want them to be in, and to orient them to the things we want to orient them to. Okay. So that's part of what we're going to cover now when we come back, on how we choose critical content that is difficult and how we can enhance it to make it easier for all kids in an academically diverse class to learn it. Okay?

So, how about if we take, you've been so good, we'll take 12 minutes this time. Okay?

## [Break]

**DR. DESHLER:** If I were to draw a map of this content, how would I do it? If I were to put the key chunks in bubbles, what would be the bubbles? What would be their relationship one to another? Would it be sequential? Would it be compare and contrast? Would it be cause and effect? And so on.

Okay. Now the reason we want to do this mapping of content is to confirm or discover what the organizational structure is of the content. It's one thing to identify key chunks, but then how are those chunks related together, and can you as a teacher articulate an explicit relationship of chunk one to chunk two? Because if it's fuzzy in your mind, what do you think it will be in the kids'? Fuzzy squared. Right? Okay. So

it's making certain we understand it clearly. That way, we can structure and organize it that way.

So after we do that, key questions, and they'll be a part of the content that we map out. We map it out. Then we stand back from it and we say, okay. Based on my experience of having taught this in the past, based on what I know about adolescents and how they've struggled with this before, what's going to be difficult? Okay.

Now how do you determine what's difficult? Some of the factors you might want to look at is some of the content that is, there's a bunch of it. It's density. It's abstractness. It's relevance or irrelevance. How much background knowledge is required, the complexity of it. A host of those things can define content as being difficult. Okay. But this requires you as a teacher or teachers to think about the content, to think about your kids, to think about kids in the past that you've worked with.

Now, here's a procedure that we have found to be helpful in this planning and as you're spending time thinking about this in your mind, working it through. In a class that you're going to be teaching this to, select three kids. Select a high achieving kid, an average achieving kid, and a low achieving kid, by name. Put their names on the top of your paper. And then as you're putting things together, sort of say, okay, how would Jason, you know, how would this relate to his, you know, skills and so forth and so on. We find it's just sort of a concrete way to keep academically diverse kids in mind as you're putting things together.

So analyze learning difficulty. And then what we do based on that difficulty is we say, okay, what am I going to have to do with that content to transform it, change it, manipulate it, to enhance it to make it easier to understand? And so what we do is we'll use some teaching devices, some graphic organizers often, to take that difficult content and reconfigure it to display it to kids in a different way. And I'm going to share with you several of them in just a moment.

Then what we do is we go out and we teach it to kids in an explicit way, and I'll go through what that teaching routine is, that teaching sequence. And then we, at the end of the day after we've done it, we stand back and we say, how did the, how did my enhancements work, did I like the outcomes, and how am I going to change it next time? So that's a little planning procedure that we use, which I'm going to sort of drill down a little bit more deeply on these, and this is why I wanted to give you a break first is what's following, okay? So put your seatbelts on.

A lot of print. So you see these, the letters here. I'm going to sort of expand those, what it is we're trying to do from a learning principle standpoint as we're doing this planning. Okay? So some key instructional principles. Number one, through SMARTER, the S part, I'm going to select critical content and make, or critical questions, and we make kids aware of those and we list them at the front of the lesson. Hey, at the end of the day, end of the, or end of the unit, here are the questions we all need to really have a deep grasp of.

So transparency. Students see the link between instruction and assessments. Okay. Those critical questions, that will become a part of the assessment. Maybe not exactly as they're stated there, but that will form what we're assessing the kids on. You know, standards and expectations at a course unit and lesson level. Okay. So we're making explicit upfront where we are. Does that make sense?

Okay. The next thing is the M part, which is mapping the critical content, is to make it coherent, so students see the organization of critical content within and between courses. Okay. That's a key instructional principle, because remember Todd standing back from the panel of things and saying, look, Dad, see this chunk here? That's where we dump fuel onto the other planes. This chunk of the instruments here is where we do this. He was given an organizational structure of critical content on the dashboard of the airplane.

Another key instructional principle, this is the A part, which is analyze the difficult parts, right? So here's where we're talking about triage. You know what triage is, right? Here's where planning reflects that the content has been analyzed to respond to academic diversity and difficulties so that learning critical content is assured. In other words, we're saying, we're going to this to say there's so much content, there's so much critical content, and we have such a diversity in the class, that is an enormous, complex order that is laid on a teacher's platter. It is enormously complex.

And so what we're trying to do by looking at the important difficult stuff and say, how can we enhance that, we're saying, what are we going to put in to triage, to limit the amount of casualties? That's basically what we're trying to do here.

The next is supported, and this is the R, which is reach enhancement decisions. In other words, choose some teaching routines, and that's what I'm going to share with you, some of these graphic organizers and so forth. But these are teaching devices, strategies, accommodations, and so forth that are used to lead and model learning. So these are going to be tools.

You can envision it's going to be a graphic organizer. We're going to take and put some of the critical content in it and we're going to engage kids in what we call partnership learning to learn that content. So we're going to be sort of scaffolding and supporting their learning of the critical content. Think of another way to think of it, we could change supported to, we could use the term mediated. And think of a teacher as one of the, for me this is what teaching, high quality master teaching is all about. It is this.

Over here, we've got kids. Okay. We've got a class of kids. Over here, we've got this critical, difficult content. Teacher is in between. They look at the kids. They understand some things about them. They look at the content, they select it. Now they've got that, and now their role is to mediate between those two, to ensure understanding over here. And they take that content, this is why you can't put this into a support class, supplemental class with someone who doesn't know the content. How do they know the nuances and what to emphasize and so on?

So they choose it. They reframe it, they repackage it, they transform it. They mediate the understanding of it. Okay. That's the important, so that's another way of thinking about supported. Does that make sense?

Okay. Another instructional principle is the T, that's teaching it strategically to the kids. We're going to demonstrate, well, we're going to be teaching it to kids in a way in which we're going to basically engage them. We're going to do some explicit instruction of it, but then we're going to pull that away and we're going to be moving on a continuum from explicit to implicit. We ultimately, or from teacher mediated to student mediated. Our goal is to get over here to student-mediated instruction. That's our goal.

And we want to get there as quickly as we can. If we flop kids there too quickly, they get frustrated. If we keep them over here on the explicit side too long, they get bored and dependent. And so we need to go back and forth between the two.

The next one is data driven, so we check for mastery of the critical content. Did it work? What do we need to do to make it work better? And then finally, we revisit, reteach, and revise.

So do you see what's involved in the planning? Aren't you glad I didn't do that before our break? What questions do you have on that SMARTER planning business? Yes.

**MAN:** You talked about when you walked into the cockpit the angst that you felt . . .

DR. DESHLER: Mm-hmm.

**MAN:** . . . don't you think that by planning a course rather than individual units or even individual lessons that you're creating that same . . .

DR. DESHLER: Tell me more.

**MAN:** Well, when you're taking an entire course and putting it out there, aren't you . . . the students to see the whole picture rather than breaking it up piece by piece like your son did?

**DR. DESHLER:** Oh. And so they get freaked out because of . . .

MAN: Yeah.

**DR. DESHLER:** Yeah. Great point. Great point. And I think how that big picture is laid out there is very important. I think of Vicki Arndt Helgesen, who, one of the best teachers, oh, I just love being in her classroom. She's about this tall, and she is dynamite. She's about this tall as a teacher. She is so cool, so great. She teaches history. And she launches her class in this way. Okay.

The first day, kids come and they do the routine and so forth. And she says, basically gives them a pitch that, I love teaching this, I've done it for years, and I'm good at it. And basically, you're going to love it. Only she says it in an inviting kind of way, okay? And she says, and we're going to be taking a trip like no other trips. How many of you like to take trips? And they talk about trips. Where have you taken some trips and so on? I mean, she really gets into this the first day.

She says, okay, we're going to take a trip throughout the course, a trip through American history. Okay, tomorrow come prepared. Bring your suitcases, bring it all, we're going to start our trip. Of course they don't show up like that, but she does. She has her suitcases. She really plays this, plays this up. And she talks to them about a TripTik. You know what a TripTik is from AAA? Okay. You know, you go from here to here, and here's where you stop to see and so forth.

She says, here's what our TripTik is. We're going to make a TripTik for our journey this year. And so she spends the first week creating the course's TripTik.

Okay. And she does it, the way she gives the overview of the course, this is really the high level, but she'll do, there's nothing to write on here, but she will do a, she'll take some events like, I'm trying to think what she does. Okay, that's a cannon. That's the Declaration of Independence or something, okay?

In other words, she does some graphics like that, sort of stick figures, and she'll, as she's basically going over the TripTik at a high level during this first week of class. And when she puts up, tells one thing, then she'll put up one of these symbols like this, and she has it going across the front of the board, above the board. She's pasting these up there. Okay. And with each one, she tells a story, and I mean it's inviting and engaging the kids and really pulling them in. And the next one and the next one and the next one. At the end of the week, she's up to current day.

Okay. So in essence, during the first week she's taught the whole course. Okay. And she says, and here are the questions that we will be able to answer during the course of this, and she puts out the course questions. Okay. And so now she has this backup. That's her course organizer at a high level. And so if she were to drill down and put all the details without stories and that behind them, I think you caution you raise would be very real.

The way she did it, it really engaged and invited the kids into it. And now when they start, you know, instruction here, they get into that first unit, she says, hold it. Just a moment. How does what we're talking about here relate to what we said is happening in the Depression up here? Right away in the second week of class, she's already linking what is happening there to what's, what they won't be covering until March. Does that make sense?

So that's that linkage of chunks of content. That's the power of having those course questions there, so that, you know, something will surface here and she'll say, okay, unh-unh. Can anyone pick up some information here that might answer one of that portion to a course question over there and some light be shed on it? You know, and she just works and plays with those course questions all year long to get that deeper understanding. So does that help a little bit? Other questions, yes, there and there.

**WOMAN:** I maybe misinterpreted what the question was, but I mean I kind of got the impression that . . . that these maps were for the kids and . . . the teacher . . . I mean . . .

**DR. DESHLER:** They're both. Yeah.

**WOMAN:** . . . you wouldn't give them all of this.

**DR. DESHLER:** There's detail things you have for yourself is at one level. But there is stuff you display to the kids, and I'm going to show you in just a moment a unit organizer. Okay? I'm going to show you a unit organizer so you can see the level of detail that we provide there. Okay?

**WOMAN:** I guess I was just thinking in response to that comment . . . and I don't want to put myself in your place, but on the . . . was that there wasn't immediately observable

to me a plan. And so you . . . to use for the whole . . . getting a picture of what it looked like, and knowing that there was a plan for how different instruments would be used, which is what lowers the anxiety . . .

DR. DESHLER: Yeah.

WOMAN: ... kids.

DR. DESHLER: Yeah. Precisely. Precisely. Great point. Yes.

**MAN:** Weren't you in awe of that aircraft?

**DR. DESHLER:** Oh, yeah.

**MAN:** I think the big picture is a great way to . . .

DR. DESHLER: Yeah.

**MAN:** That's going to take us a little bit of work . . . to break it down. Because even when you explained it, you really had the facial expression where you were upset, but that only lasted about 30 to 45 seconds until the teacher took a moment to say, relax, this is . . . and even again, your facial expression . . .

**DR. DESHLER:** Yeah. And the other thing I didn't tell you about our son Todd, he has an interesting academic history. I mean, he made it through school okay, but just unexcited by anything. I mean, he was just, he did it. He was going through the motions. And I didn't, we didn't figure this out. I mean, he just wanted to fly, wanted, you know, he'd keep coming back and talking about it.

And so finally he was a junior, and I remember I was sitting on a bed in Michigan and having a call with, you know, you've all had these with your son or daughter, whatever. And I remember saying to him, Todd, tell you what. How about if we take some private flying lessons, you know, and learn to fly. And I said, you know, we'll cause that to happen. And he, oh, boy, how cool. So he started to do that.

Well, then he did that and one thing led to another. He got into the Air Force. Then it came time to get married. Getting married, and my dear wife, she saves everything. I mean, we have books from each of the four kids, you know. So when each of them get married, time to unload. But of course, they don't want it. You've saved it a lifetime and they don't want it.

Well, we force them to go through it all. So we said, you know, so one of the things that we saved is a lot of the, Carol saved a lot of the assignments. So Todd's going through this with his wife to be. I remember them sitting in the family room. And we're sitting there looking at some and reminiscing through. I swear, eight out of ten of his little assignments he'd bring home, you know, the fill them in. I'm happiest when, he'd say, when school gets out early. I'm happiest when, you know, anything that had to do with no school, happy, school, unhappy. And on eight out of the ten papers, a rocket or a plane. We missed it all those years.

To this day, Todd is in Germany right now on a mission. And when I was talking to him Saturday night before he left, you should have heard the excitement in his voice. He loves to fly. That's the other part of the story. As a teacher, and that was there, you know, his excitement to convey that. Vicki Arndt Helgesen, man, you can't help but want to go on that journey with her, you know. It just really excites.

So you're right. The sky, we're going to think there. Think of the possibilities. And I think that's one of our roles as teachers, and particularly for, well, all kids, those who are at the high end of the continuum to, you know, what are the possibilities. And these kids who have been sounding out shorties and O's and that for years, can you imagine that? I mean, to give them an opportunity to dream and to think of those things. So yeah. Sorry to get off on this. Yeah.

WOMAN: ...

**DR. DESHLER:** No. I, and I don't want to.

**WOMAN:** That's my point. You don't give the kids all your planning because that's for you to get, and then you pick out . . .

**DR. DESHLER:** Yeah. You scaffold when they get it.

**WOMAN:** You know, I just have this image of . . . oh, well, here's the . . . the kids and then . . .

**DR. DESHLER:** Okay. Well, and that's, you two are a good Ed McMahon act. So we'll look at, here's a unit organizer. Here's a sample unit organizer, okay, to give you sort of the level that we would go into. Okay? And your point is well taken.

So this is a graphic. I'm sorry about that down there, it shouldn't be. We give this to all the kids, not filled out. They fill it out with us. We do it. We talk them through it. We create the organizer together as a class. And here, now watch, watch. This is going to be your exciting part of the day.

ALL: Ooh.

**DR. DESHLER:** Thank you. Do you want to see that again? No. The reason that I did that is to convey, we do not fill this out and pass it out to the kids. I mean, do you want to guarantee it going to the bottom of a birdcage, do that. You have them, you know, fill it out with you. You talk about it and so forth to paint some pictures.

So here's some of the things that are involved in this. For example, there's this, the organization. And this happens, the current unit that we're on is the causes of the Civil War. Okay. And the way this is, the causes of the Civil War is about, and what the teacher did here, and this was taken from a teacher's class who did it. This is Jerry Leeper(?), another great teacher.

He was introducing the causes of the Civil War, and we happened to be in his class. And he had in front of them, when he was talking about it to the kids, he had an orange. Okay. And he had it peeled, and he showed them, he did that before class,

showed it to them and he's holding it up and talking about how delicious this orange is and blah, blah, and about the Civil War. And the things that really led to the Civil War and its outbreak is this whole notion of sectionalism. And he was describing what that meant and how the forces were coming from different places.

And it got to just a breaking point, and he threw the orange out to the kids. And he had it, in advance, broken into three big chunks. And there it was, and it broke in the middle of the air and fell down on their heads. But that's how he, that was his paraphrase for the course. But it was sort of a memorable one, right?

But that's what you do. You say, you take, here's the unit and you come up with a paraphrase. It need be a one-word paraphrase, but something that the kids, if they were asked at home around the dinner table, what is your new unit going to be about, they could give a paraphrase on it. It's giving them a handle to talk about that content. So it's very simple.

Then these are the big chunks. This is the content that we have mapped out in advance, here it is. But notice, as we unveil this to the kids, and we would probably do so one chunk at a time, notice what is, we've got on the lines here. You see these labels? Many of you have seen maps like this, right? Have you seen it always with the labels on it? Probably not. Here's why the labels are there. And it got there because of some research studies we conducted.

When we did these initially, we did not have those line labels on there. And we found that this mapping benefited the average and high achieving kids. The low achieving kids it did not help. Didn't help them. What we found is that they lack the language, the connective words. So notice how this works. The cause of the Civil War is about sectionalism. Sectionalism was based on areas of the United States. Sectionalism emerged because of differences between the areas. So we're giving them the connective language that they need to talk about it. In the absence of that, they don't have those connectives. Is that right? That's one of their big stumbling blocks.

So you see how we can build this in, and we're building a support in for those kids at the lower part, the 10<sup>th</sup> percentile up to the 30<sup>th</sup>, 40<sup>th</sup> percentile kids. Does it hurt the gifted kids? No. It doesn't hurt them at all. But that's how we can, but this whole thing will help all the kids. Right?

Okay. Another thing that's in there, we point out to the kids how the, the kind of structures that we're going to see. Hey, if we're talking about the cause of the Civil War, we're going to be doing a lot of comparing and contrasting, what was happening in the North, South, and West. We're going to be looking at some cause and effect.

Now the reason we use that language and point it out is because they often see that on state assessments and so forth. So we want to bring that language of learning into instruction. This is part of teaching kids how to learn.

Another thing we have is the questions, I'm sorry for my label down there. But these are big guiding questions that we put down here. Oops, I probably had more. No, this is, just to point out so we're helping kids in describing things. Current unit, this is the last unit, that's the next unit. So they're sort of seeing how information is connected across units.

And then notice the thing that's over the top, an overlying, overriding umbrella. That's so that we're giving them that higher order language, so that they're not just talking about the finites but they're getting the big cookie jars. Okay.

If we want to have kids learn the critical content, it's this kind of, we believe, transformation, manipulation, the creation of learner-friendly tools of learning, and this is done through the planning process. Questions. Yes.

**WOMAN:** How much of the knowledge structure and guiding structure . . . should you provide to the students . . .

**DR. DESHLER:** Good question.

**WOMAN:** . . . how do you do that?

**DR. DESHLER:** Good question. How much of the guiding questions and the knowledge structure. We pretty much, that's pretty teacher mediated, it really is. Now depending if this unit is sort of an extension and a, you know, an extension of sort of what this one was and sort of a replication.

If you're in science and you did one phylum here and another here or something, and you could say, well, how do you think it's going to be structured? You can engage them a little bit. But if they don't have it, you know they don't have it, it's not in their background, we provide it. To the degree that we can engage them, we do.

Now when we put this up there, after they get into this and you have framed some good questions, we put that on there and we say, what do you think would be? Now you see what the content's going to be, what do you think would be a good question for us? What do you think we'd want to be able to answer at the end of this?

At the beginning of the year, you know, they're not good on math. But if you keep identifying and pointing out what is a good question, what's not a good question, they can start to frame good questions over time. Set that expectation. Give them opportunity to practice doing it. Okay.

All right. Here's another content enhancement routine. Now that was a planning one. That was to help, that's what, excuse me, a planning, that was an organizing one. It shows kids the beginning from the end, it shows them how a chunk of content is organized, what the key questions are, and it gives us a systematic way of how we're going to proceed through it. And every time that we go to one part of the unit to the other, the kids talk about it.

You know, and, you know, this, we may cover these two bubbles and we'll say, okay. What's the, help us talk about the connection between these. Let's do that. Let me get this up. Okay, let's have a conversation of this. And you're going back and forth, so they're manipulating or working with that content, and there's a host of ways you can have the kids engaged with that. But you have a template here that there's just a broad array and rich things you can do with this.

Okay, concepts. Key thing is if secondary grades is, so many blooming facts and details for kids to learn, right? All those facts and details become much more manageable, palatable, and learned for a longer period of time and have much more meaning if they are taught core concepts that go along with it. Okay? And so it's one of the most important things we do in planning is to identify what is a critical concept.

For example, cause of the Civil War, what's an underlying concept there?

WOMAN: ...

**DR. DESHLER:** Think about it. What's the subject of the sentence?

WOMAN: ...

**DR. DESHLER:** Civil War. Wouldn't it be sort of important if kids have an understanding of what the concept of the Civil War is? Slavery can be another concept. But I mean, so what are the key ones that we're assuming the kids know, we want them to know, and we're going to be tying a lot of learning to?

Well, in this case it's going to be civil war. We want to make certain kids understand what's the difference between a civil war, world war, or this war or that war. So watch again. Oh, this is the second thrill for the day. Okay. So note how we do this. The Civil War is our concept.

Now we teach the kids, every cookie has a cookie jar. In other words, you leave a cookie out on the counter, it gets hard and crumbly and it's no good to eat. You want to keep it in a cookie jar so it's nice and fresh and chewy. Just like cookies, information needs to have a cookie jar to go to. So civil war, if it's hanging out there by itself, it can get stale and crumbly. So we got to connect it to something. Civil war is a cookie jar. What is its, is a cookie, what is its cookie jar? Its cookie jar is armed conflict.

Now if one of the cookies is civil war in the armed conflict cookie jar, tell me another cookie in the armed conflict cookie jar?

[Simultaneous discussion]

**DR. DESHLER:** Revolutionary war. What would be another one?

[Simultaneous discussion]

DR. DESHLER: A world war.

WOMAN: ...

**DR. DESHLER:** Okay. Then we can name some specific wars. Okay? So you see, so kids can see that there's a larger, see, this is higher order. You talk about gifted kids, higher order. The moment you're talking cookie jars, you're talking higher order thinking. If you don't have the cookie jars, you have facts and details. And if you'll give kids the, bless you, cookie jar or the cookie jars, it's easier to talk about the concepts. As a matter of fact, over lunch I'm going to get an example to underscore this better.

Okay. So here's some things that are here. We start out on talk, in teaching kids about a concept. And basically the way we do this, say, hey, you know, for the next couple weeks our unit is on the cause of the Civil War. Uh-uh, what's the Civil War, you know? And so we say, we ask the kids. Tell me, when I say Civil War, what comes to vour mind?

So prior knowledge, we missed out. These are things that the kids may say as you ask that question. So it gives you a little sense of where the kid's coming from on

Civil War. I mean, if they all have a slam dunk knowledge of this, scrap that lesson plan and watch a movie for that day and move on. But you want to build on the kids' knowledge. Okay? So that's one thing.

Another thing that we've got is the hierarch of categorization that I talked about, the cookie-cookie jar thing. Another thing that you've got here is an analysis. Whenever we're teaching kids about concepts, okay, we want to identify, and this is, I mean look in the literature. How is a concept defined? You define a concept by naming it, giving the overarching concept, and then identifying the characteristics. But, they talk about three kinds of characteristics with any concept, characteristics that are always present, sometimes present, never present.

For example, with civil wars. Something that is present in every civil war is it involves groups of citizens, within a single nation, it's about distribution of power. Those are three characteristics that cut across all civil wars. Now, sometimes present, are all civil wars caused by economic reasons? No, but some are. Religious? No, but some are. Likewise, ethnic, social, political. So you see that and why it's important.

And we use symbols on the graph here to depict that. A solid line means always. A wavy line, sometimes. A dotted line, never. So war between nations, not a civil war. It's non-examples, non-characteristic. Okay. So we use the symbols on the graph.

Okay. Another thing that we've got are examples and non-examples. If you really want to tie down the understanding of a concept, give kids a host of examples and non-examples. And then have them place an entity in an example or non-example. I'll have you do it. Question, was the American Revolutionary War a civil war or not? How many of you think it was a civil war? How many not? Okay, let's see.

Here's how you, yeah, not sure, right? Here's how you determine. What did I say? For a concept to qualify as being a member of that family, it has to what?

[Simultaneous discussion]

**DR. DESHLER:** It has to have all of these. Let's see if it does. Was the American Revolutionary War among a group of citizens?

[Simultaneous discussion]

**DR. DESHLER:** Was it within a single nation?

[Simultaneous discussion]

**DR. DESHLER:** Wasn't it the British nation?

[Simultaneous discussion]

**DR. DESHLER:** Was it about distribution of power?

[Simultaneous discussion]

**DR. DESHLER:** Yes. Yes. Yes. Therefore, the American Revolutionary War is an example of a civil war. Okay. Now, you can have arguments on this. Well, no, but what about the French or what about this? Do you want that happening?

MAN: . . .

**DR. DESHLER:** Yes. I mean, you know, there's not necessarily truth on this. This is a tool to have kids manipulate, work with the knowledge, and get into it. And you want to push them a little bit and so on. That would be great.

Now again, my stupid . . . label. When you transfer files from one to another, the label on the thing comes back. So I'm going to read this to you. You tell me, now this, what is down here is the definition. So after we've done all this, we're going to come up with a definition of a civil war. Okay? And we're going to have the kids construct the definition. We're not going to do it. Okay.

I'm going to read this to you. You tell me where it came from. A civil war is a type of armed conflict. Where did that come from?

**WOMAN:** A category.

**DR. DESHLER:** Okay. So you name it, you name the cookie jar that it's in. A civil war is a type of armed conflict among groups of citizens of a single nation that is caused by concerns about the distribution of power. Where did they come from?

[Simultaneous discussion]

**DR. DESHLER:** The always present. So the way you define a concept is name it, name the cookie jar, name the always characteristics. That's how you do it. So no longer do you use the, put the definition on one side of the 3x5 card and the term on the other and have kids cram it in their head. Here they have constructed it and it has some meaning behind it.

Now let's just stand back for a moment and look at this. Let's think our three groups of kids, 10<sup>th</sup>, 50<sup>th</sup>, 90<sup>th</sup> percentile. Does a use of a tool like this, what is its relevance, what is its appropriateness across those three groupings? Where does it fall down? Where would you say, yeah, but for this kid's, this for that kid's what? This a yeah, but opportunity. Yes, Steve.

**STEVE:** You keep saying that the kids help do this, correct?

DR. DESHLER: Mm-hmm.

**STEVE:** . . . I mean, to me, I would think it would be . . . need some assistance . . . tell me more about . . .

DR. DESHLER: Yeah.

STEVE: ... I would think ...

**DR. DESHLER:** See, and this one is one that we do a group of kids, and we're guiding them. We're guiding the whole class through this. So, and is the way it's typically used. Now let me tell you where it can be used. I envision or sort of presented to you as you're launching a unit or launching this concept of civil war, the unit upfront.

Another place where teachers have used it is sort of as a review mechanism at the end. Okay. So it can be used in a variety of ways. Yeah, a couple other comments. Yeah.

**WOMAN:** I just had a question about using the concept diagram. Couldn't you utilize at the beginning of your unit and then maybe at a checkpoint and at the end also?

**DR. DESHLER:** Sure. Absolutely. Absolutely. Yeah. And can you envision using, tying this into the assessments that you do with kids? Yeah. In the back and then you, okay? We have one back here first.

**WOMAN:** I was . . . has problems with kids working on . . .

DR. DESHLER: Yeah.

WOMAN: ...

**DR. DESHLER:** Yeah. And this is a time when you can be the mediator of the critical content. Yes, sir.

**MAN:** Now I'm . . . question . . . for kids . . . at that level . . .

**WOMAN:** Yeah. You don't want to . . . basically the same thing where . . . ones and for vocabulary . . . and still not follow it . . .

**DR. DESHLER:** Yeah. And as we're putting language up here, if you're mediating the instruction, that's where, you know, hopefully you can be translating, defining some of these terms to bridge that a bit. Back here and then here. Yeah.

**WOMAN:** ... how ... out the answers and I take what they answer. But if it isn't exactly the ... I'll say, all right ... I know it ...

WOMAN: Yeah.

**WOMAN:** . . . because you can change their wording around or sometimes they need . . .

DR. DESHLER: Yeah.

**WOMAN:** So that they're saying, well, you know, it's a fight where people have died. Perfect, that's an armed conflict.

WOMAN: ...

**WOMAN:** And you steer them to where you want them to go, and then they all . . .

**DR. DESHLER:** Great. Thank you.

**WOMAN:** . . . I've had kids, you know, failing kids, kids with bad grades who are from military families and . . .

DR. DESHLER: Sure.

**WOMAN:** . . . and they could . . . for example, they know that the war . . .

DR. DESHLER: Sure.

**WOMAN:** So I think maybe some of the kids that would normally not . . .

**DR. DESHLER:** Yeah. Great. Okay, there and here. Okay.

**WOMAN:** I guess just listening to some of the comments and then thinking about some . . . thinking, tell me I'm wrong, but . . . had some assessment for, let's see whether the kids can fill this out, but it is in fact a teaching tool.

**DR. DESHLER:** It's a teaching tool. It is precisely that. It is precisely that. Thank you. Now, at the end of the day, at the end of the day, to underscore the importance of this as a tool, it can be embedded in the assessment in the end. Because you know, let me tell you what we've found in the work. We teach kids strategies and we get up and flap our gums, how important these things are and so forth. And then it comes to the time of the test, and what is the test? It is 100% content. Nothing on their own strategies. Hmm, they say. Forget this. That doesn't make any difference. I don't get any, why should I invest energy in that?

So if you're saying strategies are important, you're saying learning how to learn and using these, thinking this way is important, it better show up on the assessment where they get credit for using good strategies. I mean, because isn't learning how to learn as important as the content, or it has value. If it has value, we should reinforce it. One other, and then over here.

**WOMAN:** I guess I would also see the value in this is . . . main task . . . concept . . .

**DR. DESHLER:** Absolutely. Again, it's the old fuzzy thinking theory. If you don't have this thought through, you know, yeah.

**MAN:** ... you can use it to strengthen ... vocabulary from the beginning and things like that. But using it in a whole class activity, even at different points in the unit, for example, how, the challenge is going to be managing this so that the more

knowledgeable kids don't also want to  $\dots$  discussion  $\dots$  class. How do you distribute their prior knowledge within the class that all the  $\dots$  maybe it's through  $\dots$  or whatever like that  $\dots$  just having the 15% or 20%  $\dots$ 

DR. DESHLER: Yeah.

**MAN:** . . . for you basically.

DR. DESHLER: Oh, yeah.

MAN: ... conversation ...

**DR. DESHLER:** You can't even get the question out. They have the answer, yeah.

MAN: . . .

**DR. DESHLER:** Yeah. One thing, and this is just one little thing, is you can plant an answer among some of the kids who, you know, may have some general knowledge. But you say, hey, at a certain point we're going to be covering this. You know, this is one you can offer to the class discussion. Yeah.

**WOMAN:** I was just going to say, it seems like what your point was is exactly that. There are kids . . . areas, so even though . . .

**DR. DESHLER:** Yeah. Yeah. And you know, and this is where the, those questions are so good and it is answers to those kinds of questions that really keep something like this afloat or can take it to the bottom. And it's, you know, like the armed conflict thing and, you know, redirecting slightly and so forth.

You know, the master teacher at work and feeling this, and it's, a good part of this is not just teaching kids the content, teaching them the mechanism to use, but it is creating a culture within the class that I've not talked about at all, and I will do this and we'll, and so you can get a jump on lunch. What do you do? Do you get in line in here for lunch or is that, so you'd like to get in line early, huh? Okay.

Oh, I see, first time everyone's agreed with me today. Okay. Just real quickly. On the, a little blurb about upfront in a class. And I have not showed you course organizer, but a part of the course organizer when we launch a course, like Vicki when she launched the course with the history thing. Okay. A part of that is a blurb that she has on the role that we're going to play in here. And the role is, and her line goes something like this. Everyone here has value. We all come to the table here with different skills, different knowledge. Okay.

And she does some things to point out, you know, some of us have difficulty remembering stuff. Some of us, you know, have difficulty inhibiting a response, and we just have to get it real quickly. And you know, and she basically gives the message, and she does it masterfully, but in addition to learned content, learning how to learn the content, a third big goal we've got in our class is to learn how to learn together and to support one another, and to encourage one another to make contributions. When good

contributions are made, to acknowledge and to reinforce. When someone's speaking, to turn and listen to them.

And she sets that expectation and she makes kids stick to it. And so it builds in a level of respect for one another and a tolerance, a wait time, all those kinds of things, and as well as a time for certain kids to really shine. And she turns to them and really showcases their talents and so forth. So has done it beautifully.

One other comment and then we'll break for getting in line.

**WOMAN:** I was just thinking, to piggyback off of the gentleman's comment over there about how to get all the students engaged, and I think one of the ways maybe to do that is by pairing students, you know.

DR. DESHLER: Great.

**WOMAN:** . . . two levels together of students.

**DR. DESHLER:** Great. Thank you. And you will say the closing prayer.

WOMAN: ... one of the things we talked about ... today, and we looked at that and

. . .