MICHEAL RETTIG: Let me give you a little more background for a frame of reference about what we're going to do. I'm a New Yorker, and I grew up on Long Island. I'm a, as was mentioned, a Syracuse University Graduate. I taught in the Syracuse City Schools for 10 years and started my career as a first-grade teacher. Then after one year of doing that, I took on a primary multi-age class; I had first, second and third graders in the same classroom. So I had about eight or nine first graders and eight or nine second graders and eight or nine third graders and graduated my third graders out and got a new crop of first graders every year. After three years of doing that, my principal asked me if – we had a sixth-grade teacher retiring – and she asked me if I wouldn't like to teach sixth grade. That was back in the day when sixth grade was still in elementary schools. At first I said no, and then I agreed to do it. One of my students, Patrick, who was one of my first graders in the primary multi-age, he said – he was upset with me – he said Mr. Rettig, I don't know why you want to teach sixth grade. Right now you teach first grade and second grade and third grade and one plus two plus three is six – what's the difference?

I went ahead and taught sixth grade for three years in elementary school; then we moved to middle school concept in Syracuse, and I moved up to the new middle school with the sixth graders for another three years of teaching. So, I taught for 10 years. I got my masters from SUNY Cortland in early childhood education and then my administrative certificate from Syracuse, and then about 28 years ago I went looking for a job in school administration. At that time in Syracuse, we were in a period of declining enrollment and closing schools. I suppose – to be perfectly honest with you – there was somebody in Central Office I thought was an idiot and I made the slight political error of sharing my feelings, so I was going nowhere fast in the Syracuse City Schools. I called a friend of mine who taught at the University of Virginia, made some contacts down there and ended up as an assistant principal in Martinsville, Virginia, on the southern tier of the state near the North Carolina border. I went on to become principal in that school division and had some great years there.

When I became a principal in Lexington, Virginia, which is a college town where Washington and Lee University is and Virginia Military Institute, and had some wonderful years there as an elementary principal. I decided to go back and get a Ph.D. and did that at the University of Virginia. And then, for the next – so, my Ph.D. is in Educational Leadership and Policy Studies – and for the next 15 years I trained school principals at James Madison University; I ran the leadership program there. While there, I became very interested in school scheduling and working with a colleague at the University of Virginia, we wrote a book in 1995 on high school scheduling called <u>Block</u> <u>Scheduling: A Catalyst for Change in High Schools</u>. I also have a book called <u>Teaching</u> in the Block in 1996, a book on middle-school scheduling in 2000 and then just in 2008, our elementary-school scheduling book came out. We're quite proud of it; it was, by far, the hardest one to write because elementary-school scheduling is, by far, the hardest scheduling to do. Your colleagues in secondary education discover that if they ever venture down into our midst. And the reason that elementary-school scheduling is so much more difficult than secondary-school scheduling is because at least at those levels – middle and high school – they've agreed on one important thing; the length of a period or a block or whatever it is, they're all the same, you know, and not so much in elementary school. So, therein lies part of our problem with scheduling in elementary school.

So, I retired, as we said, four years ago from (inaudible) school for about 20 years, and that's what I do full time. I was in Easton, Pennsylvania on Tuesday and Wednesday. I will be in Nazareth tomorrow. I'm here today. Next week I'm working a couple of days in Las Vegas and relaxing a couple days with my wife there, and I've done some – like it was said – I've worked in Pennsylvania a lot, mainly some PaTTAN sessions that have been around the state, so I have lots of experience in your state and know something about it anyway.

On a personal note, I'm married and have three children, and I am guite proud of them. That's my son, Dan, right there, and he's one of us. He is a middle school math teacher, and he's in his seventh year of teaching. He is married to Erin right here in purple; she's an elementary counselor, and they both work in the same school division, which is the Henrico County Schools right outside of Richmond. And then, because I'm in charge, I get to do this. Twenty two months ago, they made us very happy. We got a lot of snow in Virginia this year, and that's Sean Michael and I heading down the hill. So then, my youngest one right here, Allison, with a card in her face, she is a junior bachelor's and master's degree, too, in teaching, but she got out last year, which was not the world's best year to get out of education programs, so she is working in a bank full time right now with benefits, and she is getting married this summer - I'm upset about that! And then my renegade non-educator right there is - that's her graduation, we're okay with her though - that's her graduation for UVA Medical School. She's finishing up a residency in family practice right now in Boston and then will move on to Rush Memorial in Chicago next year for a one-year in sport's medicine. And that's my wife and her sister.

What are we going to do here? Oh, I know what I need to do. It's been a while since I was in the classroom, but I do like to provide a little proof that I was there, and I provided this proof in response to an e-mail I got from a student. When you're in elementary ed, you don't hear from your students all that much, you know, years hence, especially if you moved away from where you did your teaching 25 years ago, okay? But every once in a while I will get a contact from somebody I had back in the day, and I got an e-mail about three years ago from a student I had in my second year of teaching in first grade in that primary multi-age, and here's what she had to say. "Dear Mr. Rettig, I was once your student at Webster Elementary, and I am currently working as a

teaching assistant at Paul V. Moore High School in Central Square, New York. Recently, we had a keynote speaker address the superintendent's conference; she asked us to remember our first grade teacher, and did they impact our life? Are we, as educators, leaving a legacy? It was easy for me to recall my first-grade teacher as you were also my second-, third- and sixth-grade teacher. And, she goes on to say some nice things, and she is working in a school and all that, and I remembered her. So, I went back to my box of educational memorabilia - everyone of you has something like that where you have pitching your class pictures and programs and that kind of stuff from your career - dug through it, found all the pictures I could find of Kelly and scanned them into my computer and e-mailed her back with this mega e-mail with pictures of her in my class back in the day. Unfortunately, I happened to be in some of those pictures, so be careful what you say here! Here we go, here is Carolyn she is inthis is Carolyn in first grade in my primary stage about 30 kids there. We had a substitute teacher that day! John Travolta was in the house! Some of you remember this stuff - some of you, not many! I had a 20-something in one of my sessions not too long ago; he asked me if I still had that suit. No, I have the medallion I used to wear with it, though! But these are my first graders down here, my second graders kind of in the middle and my third graders up at the top. That's Billy right there with the tie on. You're going to see Billy in the next picture, too; he always wears a tie. Where's Billy, where are you Billy - no, not there - that's not Billy. Come on, where are you? Oh, there he is, yeah, yeah, there's Billy. And Kelly is right there. Then this is the next year - I was a student teacher, I guess. And my son is a teacher and, you know, every once in a while we go over to his house visiting he and his wife and Sean, and he'll come back from school and I kinda look at him with my administrator eyes, and I'm thinkin', man this guy's not all that well pressed for being a professional in education, and I start to think well, maybe it's just this, you know, this new generation thing, you know, but then I look at this picture and I wonder if it's more genetic than generational, you know; it's not so hot. Then this is um...

I started my career, my college career, as a music major. I was a trumpet player until I discovered that the Chicago Symphony wasn't in my future, and then I switched to elementary education because then I could do everything. I was really interested in everything, so I still did music, played a little guitar with my kids, and they got pretty good. So they used to do solos and duets and trios and then the whole class would come in with the chorus, and we got good enough we put the show on the road. This is somebody's retirement there, and that's Kelly with a couple buddies in a trio, and that's the same gig, I guess. This is out at a mall - that's her little sister - that's why that's here. And this is the sixth grade trip. When she was in sixth grade, we went to Montreal, Canada for three days with our whole sixth grade from our elementary school, which was a pretty cool trip for these kids - most of them had never been out of Syracuse. Terry is sitting right next to her, too; I mentioned Terry for a moment. She is going to show up in a discussion again. Oh, we did a joint production of the "Wizard of Oz" when Kelly was in sixth grade. She happened to be the scarecrow, but it was joint production of sixth graders and first graders together, you know. Great music teacher. We had to have first graders in the production, of course, because we had to have munchkins and

flying monkeys and Toto, you know, so it was a good combination. But the leads were all fifth and sixth grade, and there's that and there's one of the high-tech programs, and then this is class size. Yeah, I'm cheating. That was two classes. There's - It's still pretty big there's probably 60 kids there, but the years that I had the primary multi-age, first, second and third grade, I community organizer-taught with my friend lola, who had the intermediate multi-age, fourth, fifth and sixth grades – we were kind of two-room schoolhouse was in our larger building – and we actually carried kids back and forth; it was lots of fun. She hated to have her picture taken, though, so she wouldn't get in the shot. That's why I'm standing by myself. But Kelly's around in there somewhere. And this is sixth grade – sixth grade – when she was in the sixth grade and then standing right here with her eyes closed. That's Terry right there.

I point Terry out because she is another person I got an e-mail from not too long ago, a couple years ago. It was kind of embarrassing, but it's so nice I have to share it anyway. "This is a brief e-mail to say thank you, thank you, thank you. You probably don't remember me, but you were my sixth-grade teacher at Webster Elementary School in Syracuse, New York. Now that I have four children of my own, I've come to the conclusion I was a bit of a challenge at times. In short, I often think of words of encouragement and how they made a difference in my life. I lived in the housing projects, my family was on Welfare, and all my friends were becoming pre-teen and teen moms. After your class, I became an A student, graduated from the U.S. Naval Academy, became the first African-American woman, arguably the first woman assigned to a combat tactical jet squad. I worked for the Joint Chiefs of Staff in the Pentagon and on and on, had a pretty good career and still having. She says some nice things; so it's a sweet note to get. I hope you get those. I just got "friended" by another student I had in sixth grade in the late 70s or something like that. Those are always interesting ones to get, you know, and you don't know what to do with them sometimes. So, there we go! There's that.

What are we going to do? The first thing we're going to do – this is a double session; I'm not repeating this afternoon what we're doing this morning; it's a double session. We will need every bit of that time to get into the kind of detail that we want to get into. So, I'm going to start by reviewing some of the major issues that impact elementary schools that are related to the school schedule and sort of set my goals for quality elementary master schedule. And we are going to be talking a lot about building a master schedule in elementary schools. One thing that every middle school and every high school in this country has is a master schedule. By a master schedule, it a document that shows where every teacher is teaching, where they're teaching, what they're teaching and who they're teaching. Okay? And you can pretty much rest assured that when you walk in to Mrs. Jones, the English teacher's class in second period or third block and she's got a group of students, that English will be happening in there, okay, in some way, shape or form. It's not quite so clean in elementary schools around the country. In fact, I would argue that most elementary schools do not have a

master schedule. I would argue that they have a PE schedule and an art schedule and a music schedule and scheduling a recess schedule, okay? And those are handed out to the classroom teachers typically who then take their own calendars – their weekly calendar – and place those blocks on the calendar, you know, their lunch and recess and their specials on there, and then they start trying to fit in their academic blocks around that, okay? So, we've had a lot of discussions about language arts in this country and how long we ought to spend doing that, so the first thing they start trying to fit around is their language arts blocks, trying to get as big an extended block they can without interruption. Then the next thing they try to fit in there is their math blocks, and we've had less discussions about math, but increasingly there's been discussions about the amount of time we ought to spend for math so they try to fit that in. Then the rest of their time, you know, science and social studies might get what's left over, okay?

So they kind of write out that schedule in their own format and they make a copy of it and they give it to the principal who puts it in a big stack with all the rest of the ones and calls that the master schedule. That's not a master schedule. It's a stack of individual schedules. And then you guys, and I assume there are a lot of special ed teachers – I don't know – who do I have here? First of all, how many elementary principals do I have in here? Okay. How many central office folks do I have? Okay. How many teachers do I have in here? Okay. Do I have anybody else in here? Okay. And State Department folks? Consultants? Okay. So consultants; anybody else? I've got teachers, principals – what are you? – a counselor, oh an elementary counselor, a curriculum director in a central office. Okay.

So then the principal has his big stack like that, and the teachers have done this best they can with their schedule and school starts. About two weeks into the school year, the special service providers, special ed, Title I, EOL, and all the related services – all that – have finally gotten their list together, and they know who's on their list and they begin what I call the 'when can I have your kids model of scheduling,' okay? When they begin walking around the building asking each individual teacher who has kids in their class that are on their list, when can I have your kids? So, I'm the Title I teacher, and I stop at your room. You and I are buddies; we eat lunch together every day. I go to your room first, and I say when can I have your kids? I have Johnny and Jose for Title I reading, and you say, you know, my lit block ends at 9:30; 9:30 would be perfect for you to take them then. So I say, you got 9:30. I keep going round and round and round and come to you. We all eat lunch together, you're ninth on my list, you know, and of course I ask you when can I have your kids, and you say, you know, the best time would be 9:30. Then I say, sorry, that's already taken; you're going to have to change your schedule to make mine work. You are not happy about this 'cause you had it fixed the way you wanted it, okay? But now we got to change the schedule. By the way, I'm not the only one doing that. The learning sport teacher is doing it, okay? And maybe your instrumental music person is roaming around trying to get their lessons straight, too, okay? And so there's this constant sort of deconstruction and reconstruction of the

elementary school schedule in the first month of school, which delays the delivery of services to students a long time very often. That's because we don't have master schedule, and we haven't thought about these things in advance in the construction of the schedules, and we've allowed individual teachers to construct their own. It just doesn't work very well when you do it that way, and it takes a while to get everything settled down in an elementary school.

So, my basic belief and practice is that the solution to that is the creation of a master schedule, and teachers are involved in the construction of this schedule, it's just that they don't do it by themselves. Okay? They don't construct their own schedules by themselves. So, parts of the master schedule would include the encore classes, and I use the term encore to describe all those classes that all students receive but that aren't taught by their classroom teacher – what most elementary schools call specials. By that I mean PE, art, music, library, world language, computers, whatever it might be that all students receive but that are not taught by their classroom teachers. I use the term encore basically because I was doing a session like this maybe 10 years ago, and I had somebody from the National Endowment of the Arts in my session who said that she hated the term specials because connoted something extra and probably expendable, and we're finding out how right she is right now, okay? So, I at least changed my language to encore, core and encore, and so that is what I use there.

We also have to think about how we're going to...so we have to have a plan to schedule special services – I mean encore classes – mainly because those encore teachers are share to cross all grade levels, so think about how we're going to share 'em across all grade levels, and some of 'em might actually be shared between schools, so we really have to think about that, too, okay? So the other thing that is part of the master schedule is how we do special services. We don't wanna keep doing the 'when can I have your kids' model of scheduling.' We want to have a more thoughtful process because our special service providers have some of the same issues that encore teacher do. Now special services I describe as any class or service that some kids receive – not all kids – receive. That would include, of course, all special education services, ELL services, gifted services, Title I and other compensatory services and instrumental music, because instrumental music is only some, not all, as well; it has some of the same scheduling them as we think about constructing the overall master schedule.

Another thing that we're finding increasingly in I'd say every elementary-school I've worked in the last four years is doing something with this is the notion of the intervention enrichment period. This has been really driven by the use of response to intervention in elementary schools around the country where we need a time for tiered instruction and we're trying to avoid pulling kids out of basic instruction to find that time for the intervention. So, the intervention enrichment period is kind of a compact between classroom teachers and special service providers that says this: It says for this period of time, whatever it is and we'll talk a whole lot about this, whatever this period of time for intervention enrichment is, we classroom teachers won't teach anything new in basic instruction, none of the basic curriculum will be delivered during this time. Classroom teachers will be in some kinds of interventions or enrichment activities and we'd sure like some of you special service providers to do some of your work during that time with our kids, too, okay? So that you weren't taking them if it is a pull-out program out during basic instruction. My view of the intervention enrichment period is the double-dose period, and the double dose is either more in some way, more in terms of intervention or more in terms of enrichment depending on the needs of the student. We will talk a lot about that.

I'll also talk about the need whenever possible to provide teachers what I'll call additional planning time mainly for the work that has to be done to make that IE period work, because putting an IE period on a schedule is relatively easy. Making it work once you've got it there is extremely difficult, okay? Because it involves a cultural shift in elementary schools away from 'my class, my kids' generally to an 'our grade our kids' mentality, which is a hard place to go for many elementary teachers I find.

We'll also talk some about departmentalization because of its popularity. We'll talk about the pros and cons, the various models, and parallel-block scheduling is going to be handled in the afternoon, but it's getting off the page; it's jumping off the cliff with elementary-school scheduling. I will talk about ways that schools around the country have used a different model of scheduling to really focus in on the provision of small-group time in literacy instruction and numeracy instruction and a different way to provide special services, too. I'm not sure exactly how far we will get in the morning; we'll probably do a pretty good job through IE, but there will be lots of examples all the way through, so let's go!

I love this little quote, "I will be more enthusiastic about encouraging thinking outside the box when there's evidence of any thinking going inside it." We're going to work in the box for a while; we're going to get outside the box later, but we're going to work in it right now. So, the first thing I want to talk about is time allocation. We cannot do a schedule unless we've decided how we plan to use our time, okay? Every high school, middle school in this country has decided; they've got 90-minute blocks or 47-minute periods or 42-minute periods or whatever they are, and X gets Y and there it is, okay? In elementary school, we've had some discussions about time allocations in language arts and math, but, you know…here's the way I best express this. Put your parent hat on. You have a child in third grade. Do you think it matters what third-grade teacher your child gets in terms of how much science instruction they might receive? The answer to that question in most places I go is still yes, it does matter because we

have some third-grade teachers who feel well trained in science. They think science is important. They don't care about getting dirty, and they do a lot of science, okay? And then we have other third-grade teachers who think it's not that important; they would rather do more language arts and math. They don't feel well trained in it, they don't do it very much – they do less science.

The answer question should absolutely, positively be no. The amount of curriculum you get taught in any area should have zero to do with who your teacher is and everything to do with what our district or our school has decided is appropriate in terms of the program we're going to provide to your student, you know? That decision is above the teacher's pay grade. That decision should involve teachers who are very knowledgeable about what children need, but they don't get to make it by themselves, and it shouldn't be different in one third-grade class than another third-grade class, okay? I mean I really believe that. That's kind of crazy we've let that go for all these years, and it's been true.

Now, could it vary by child? Yes. Why could it vary by child? Well, if I have Johnny and Johnny's having trouble learning how to read and we've used up the IE period trying to help him how to read and he still needs even more help learning how to read, well we have the prime rule of school scheduling that we are faced with, which is, if thou puttest something in, thou must taketh something out, you know, which means if he needs more reading he's going to have to get less of something else, you know, 'supplement, don't supplant' not withstanding. You all remember that idiotic mantra, you know? How are we supposed to do that? You've got to supplant something. And so, at least we've created this IE period where we at least go different ways with different kids.

So - time allocation. We have to come up with an agreement on how we're going to use our time. So, I need a volunteer here, and I'm going to pick on a principal, an elementary principal. Do we have? Where are my elementary principals? Raise your hands. Come on, c'mon, c'mon, c'mon, c'mon...! Has any one of you ever been a thirdgrade teacher? I'll pick on you anyway, sir. What's your name? What's your name? Jamie, how many - when does school start in your building? 9 o'clock? And that's the time students are tardy, is that correct? And when does school end in your building? 3:22 - oh, you're very precise in your district, aren't you? 3:22, so you have three hundred and 382 minutes in your school day, okay? 382 minutes in your school day. You say school starts at nine, when can you effectively begin instruction after the administrivia of the morning is taken care of? And you know what I mean by the administrivia of the morning – 9:07. So, I am going to call that 7 minutes of home-room time right there that is kind of unschedulable. And when do you have to pack up and get out the door even though school ends at 3:22, when would you say in third grade they would be packing up? About 3:15, so that's another 7 minutes that I've figured it out, and that gives me 14 right there. Okay, now, in third grade - we're just talking third

grade because our time allocations might be different in different grade levels - how much time do you think third graders should spend daily in language arts, and I know I'm kind of thinking in a non-integrated way here, but in language arts, including reading, writing, spelling, grammar, word study, SSR, the whole gap of language arts on a daily basis average? 120 minutes. Okay, what about math? About 90 minutes of math, okay. What about science and social studies? About a half-hour, it might be science some days and social studies other days or science this unit, social studies that unit. What about in encore classes? PE, art, music, all that? 40 minutes daily average, okay. Lunch and recess? 40 minutes. And, do you have an intervention period in your day? Built in? It's not every single day. Well, it looks like you'd have time for one since we've got 382 and we're only up... Now all these things, of course, include transition, so you know what I mean? I don't put time in elementary school schedules for transitions although they exist, I realize that, mainly because they're so different. If the music room is across from my classroom, I get there in two minutes, you know? If I'm a kindergarten teacher and the gym is across the building, it takes us eight minutes to get there, you know? And so it doesn't make sense to put an equal amount of time there. Basically, my rules are: things start when they are supposed to, on time; they end when they have to, to start on time. So, about how long would an intervention period be? About 40 minutes? Okay. That's pretty close to what you have, actually.

Let me talk about the numbers a little bit and how it sort of compares to what I see around the country; 382 minutes would be shorter than the average school day in America in elementary schools. The typical elementary school day is probably $6\frac{1}{2}$ to 6 -you're not far – but six hours and a half to six forty five, I'd say. The shortest elementary school day I found in Pennsylvania – 5 hours and 55 minutes, okay? Five hours and 55 minutes. The longest elementary school day I found in Texas – South Texas – 7 hours and 45 minutes, okay? Almost 2 hours longer than the shortest one. Amazing! But the typical range is kind of $6\frac{1}{2}$ to 6:45, a lot of schools having 7 right now, 7 hours. But my middle 50% would still be in that range.

When we talk about third grade, probably the most common number I get in language arts would be 120, which is what Jamie gave us right there. That would be very common. The least you'd ever see would be 90. Nobody goes below 90 for language arts typically unless some departmentalization scheme in fourth or fifth grade kind of crowds it out a little bit because of a rotation we're creating, okay? And then anybody who's got less than 90 isn't happy with it and is fussing with it – fussin' about it. The math number that you gave me, that is high for third grade. I'm not saying it's bad it's just higher than normal. The lowest you'd ever see would be 60. And that would be true at any grade level except perhaps kindergarten. You might see 45 in a lesson in kindergarten, but there would be another 15 minutes of stuff in the morning – morning math kind of staff that would sort of make it 60 if you think about it. But the range in math is usually about 60 to 90, and the amount of math tends to go up as you go up in the grade levels, too. So, that's pretty typical. But 90 would be a lot in third grade, but I

see it increasingly. And our numbers in math – you know, 10 years ago the typical math period in elementary school (maybe 15 years ago) was probably 45 minutes. And it has been increasing a lot over the years mainly because of what's happening in high school and middle school in terms of driving curriculum down so we have kids ready to take algebra earlier in middle school now.

In science and social studies, their 30 minutes would be the least you'd ever see in third grade for the most part. Usually it is 45 or 60 in third grade, but sometimes I see 30. Encore ranges anywhere from 30 minutes a day in this country to 90 minutes a day in this country depending on where you are and the resources that they have in the difficult encore classes that they have. By the way, this chart, I think – if it wasn't online – it's at my website and it's where you can just go download it, okay? And the website is listed on the handout there. It's kind of a neat little chart to have this discussion about, but encore ranges anywhere from 30 to 90 minutes depending on the resources and whether you got language and all those kinds of things. Encore is likely to be longer in private schools, too, because private schools usually sell themselves on the special services they provide, you know, like more language and more art, more music and all that kind of stuff. So, it's likely to be longer there, too.

Lunch and recess ranges anywhere from 30 minutes in the country to 75 minutes in the country. What do I mean by that? Well, some places that would have 75 minutes might have a 45-minute lunch/recess in the middle of the day and then they'd have a 15-minute morning break and a 15-minute afternoon break. Now I always argued that those 15-minute morning and afternoon recesses are really lies because, I mean, who can have a 15-minute recess anyway with getting them out there, getting them back in, doing all that kind of stuff, you know? It usually expands to fill 30. The IE period ranges anywhere from 30 minutes to 60 minutes in the country. Sometimes it's a different length in primary than it is in intermediate, and sometimes places actually have two IE periods, and if they do, it's usually two 30's within a 60 or something like that. Then one of the IE periods is primarily sort of language arts related and one per grade levels usually primarily math related especially if they've really gone a long way with RTI. But, you know, there's no right answers to these questions. Every school system or school gets to decide for themselves, but I would argue you can't build a schedule until you've had the discussions and made some decisions about how time ought to be utilized.

Next, I want to comment on the numbers here, the numbers here. The numbers that you put in here matter. What do I mean by that? Well, the reason the secondary school schedules are so much easier than elementary-school schedules is because their periods are the same length. Now, we're not going there. But, we can help ourselves some by insuring that the building block of the schedule is as large as possible. And the sort of mathematical definition of the building block of the schedule is the greatest common factor, okay? So, if we eliminate the 14, which we can eliminate in

these numbers that we have here because it's before and after the schedule, okay? And we look at the remaining numbers in this schedule, what is the greatest common factor of all these times that Jamie gave us. It's 10 minutes, okay? Ten minutes isn't too bad, but I sure like 15 or 20 better, to be honest with you because it makes the pieces of the puzzle fit together better. If this were, say this were 45 – and we're going to go over his minutes here in a minute, I'm sure – 45 and I just went over them, I'm just going to give them, you're going to be more efficient, I'm going down to 7 there – I'm just playing with it. But, if I did that, you notice that now that my times are all divisible by 15, and I know the puzzle pieces of the schedule are going to snap together better, and I could still be saying from an encore standpoint that the encore class is 40 minutes long, but it's scheduled within a 45-minute block. That's the one place I do put time between classes purposefully is in the encore schedule; I bet you'd probably do it anyway wouldn't you? To put a little time in there and it's because you don't like kids coming in and going out of encore classes at the same time; it's a problem for the encore teachers. So I'll sometimes say, well even though I scheduled a 45-minute block to put the encore class in, it's really a 40-minute class within that 45-minute block and 5 minutes to go there.

Again, there's no right answers to these, but you have to decide. This number goes up as we go down. This number usually goes a little bit down as we go down. This number tends to be smaller in the lower grades and higher in the upper grades, and this number tends to be smaller in the upper grades and higher in the lower grades, and that's mainly because in the primary grades we tend to integrate the content of science and social studies into the language arts program, and in the upper grades we tend to integrate the language arts program into the content in the science and social studies in the upper grades. So, that's what I tend to find. But, again, you can't build a schedule unless you've made decisions about where your time should go. So, that's the first thing.

What other issues do we have? Fragmentation of the day is a problem in elementary schools and it's caused by three different things. One thing it's caused by is that numbers problem we have in the length of the different things that we have. When our basic building block of the schedule is too small – like 5 minutes is terrible – then you end up with more fragments of time in a schedule. What do I mean about fragmentation? Well, I mean the teacher comes in and they got 20 minutes with her kids and then they have to run off to PE. And they're in PE for 40 minutes and then they come back and get another 60 minutes with their kids and then it's time because they have double specials that day to run off, ok. During that 60 minutes, I forgot to say, that the Title I teacher shows up about 10 minutes in and picks up two kids, and then the learning resource teacher shows up in about 20 minutes and picks up a couple kids, and the ELL teacher shows up and picks up a couple, and then they start rolling back in, okay? Now when those folks picked them up – it's not like I can keep instructing and they just like sneak out the back door. I've got to wave to the teacher, say 'how're you doin'? How was your weekend?' And 'Johnny, make sure you got your stuff.' Then when

they come back in, do the kids sneak in the room and get to work? Not exactly! So, I've got to get them back on task and do all that. So there is this choppiness often to instruction that occurs – I'm overplaying it a bit, I know, but it does happen that way in lots of places – and that's what I mean by fragmentation. It causes the numerical problem that I mentioned earlier, the way we do special services that we've already talked about, the 'when can I have your kids?' model of scheduling and also the way we do encore.

What do I mean by the way we do encore? I don't find this too much a problem in Pennsylvania, but I do find it a problem in some places. There are about four problems with the way we schedule encore that create choppiness in our schedule. The first one is periods of unequal length for the different encore classes. I was in Michigan six years ago or so, and I remember working in a district where in the intermediate grades art was 60 minutes long, general music was 45 minutes long, PE was 40 minutes long, and I think library was 30 minutes. And then, in the primary grades, art was 45 minutes and PE and general music were 30 minutes and library was 25 minutes. Try putting that schedule together, okay? It was nigh onto impossible. And so, kinda', I've discovered to have a good encore schedule, you have to have a compromise as to what the period length is gonna be for the encore classes. The trouble is that the different encore teachers have a different idea of what that ought to be. Your art teacher guite reasonably thinks would like a longer time period because they've got a lot of set up and take down. So I find that sort of the perfect time most art teachers would like for that would be an hour. Your PE teachers and general music teachers generally prefer more frequent touches of the students over the course of a rotation or a week, and they'll take a shorter period; more like 30 or 40 minutes would be more ideal for them. Library is probably closer to the music and PE vision there. But, the problem is that if we have all these different period lengths, it's almost impossible to put together a good schedule.

So, we usually compromise, and the typical compromise is somewhere between 40 and 50 minutes I find for encore classes. Usually, if it's 45 – the most typical is 45 – and the art teacher isn't happy with it because it's too short and the PE teacher isn't happy with it because it's not frequent enough, and, you know, nobody's happy; it must be a good compromise! So, that's what I find. I do occasionally find that I'm in a district where they can do a – what I'll call a sort of modular approach to the way they provide encore. What do I mean there? Well, art might be 60 minutes and then they have 30-minute other things that sort of fit in the same box like PE and general music and library and computers, and while one teacher is in art, two others are in…one's in PE and one's in music and then they switch. You understand you can create this like modular box. The problem with that box, especially in a typical elementary school with six grade levels, there's not enough hours in the day to get one every day, and the other problem is those 30s that you build within the 60s are really 25s and they start to get too short to be particularly meaningful instructionally in those subjects. So, the only time I've really been happy with that sort of modular approach is when I'm in a place that has enough

resources to do an 80-minute art block and then they'll do 40s within that. And that works well, and I've done it about five places; four private schools and one wealthy school district in Ohio and that's it. Nobody else has that kind of resources for the most part in the country to pull that kind of thing off or the length of the school day to do it in, too, where they would be willing to give up 80 minutes every day out of their academic instructional program.

The second problem with encore scheduling is the preference of some encore teachers – not all – to like a schedule like this. You know, if I were an art teacher I think this would be my perfect schedule. Give me about an hour with one first-grade class followed by about a 10-minute break. Then let me have an hour with another first-grade class followed by about a 10-minute break, and then...you understand? One prep, set it up, to it three times, have a break - that'd be good. The problem with that is this. Number one, no common planning time for the grade level. Okay? Problem number two, no common teaching time for the grade level because one of their classes is gone each part of that morning or afternoon. And another problem is a problem that you're well aware of. If I'm a special service provider and I have to pull kids across multiple classes within the same grade level, if one of them is out of art at a different time than another one is out of art, it is not very clean for me to do that. I'm searching for these times where I don't - you understand what I'm talking about - where I don't take them out there. So, it's a problem for special service providers. So what you generally try to do in an encore schedule is create a situation where there is common planning time for the teachers. One teacher or two teachers are out of PE, another one is out of music, and another one is out of arts, somebody's in computers if you have that. Try to get the whole grade level off all at the same time because it does those three good things: Common planning times for the teachers, common teaching time for the teachers, and a cleaner schedule for the special service providers to work through. So that's generally what we do.

What else? Intervention enrichment we're going to talk a lot about. With the advent of RTI and other intervention programs that we have, we are looking for times to provide instruction to students, both interventions and enrichment activities. You'll find that I'll do a fair amount of emphasis on the enrichment part of this because I think it's the missing piece of the puzzle when we talk about RTI, and that's got to be in there, too. So we will talk about that, and you'll see we'll build schedules with common planning time, so let's get going.

My goal for quality elementary school schedules tends to be to have consistency in the elementary instructional day and the implementation of the district curriculum – that's pretty much the time allocation agreements – to protect instructional time for optimal delivery of both core and encore curriculum; big blocks of uninterrupted instruction. I generally shoot for no chunk of instructional time less than 30 minutes in

the day because once it gets...you get those little 10-minute slivers in the schedule, they're always in danger of being wasted, you know? So try to do that - not always successful. Provide time for special services and intervention enrichment that is symbiotic with the core instructional program, doesn't eviscerate the core instructional program, so we want to do that. And then daily common planning time for all teachers in their particular team and grade level. What do we do? It's not a linear process. I know I've got these seven steps numbered here, but it is not linear at all. Generally, you do have to decide how you're going to use your time. What are the time allocations? And you have to have a pretty good idea about your approach to doing the encore schedule and what that rotation might be to provide those classes and planning time to your class-room teachers. And then I might start scheduling the encore blocks. The only reason I start there is because I know I have to share those across the different grade levels; I gotta make that work. Then I will probably start to build...I'll do a guick check on encore, see where we prefer it, and then we start to build the academic blocks. In building an academic block, I don't like the way it lies because where encore is, we might move encore for somebody, we start adding the IE blocks – I like to attach them to chunks of the academic schedule if possible and it might mean that we change this or change that as we add those in. I don't lay lunch and recess out on the schedule first thing. I know there's some good reasons why one might do that; I tend to try to feed it in as I build the whole schedule knowing full well that if I do a poor job of that, the principal has a terrible day every day. But, you know, there are always parameters for lunch and recess, but I don't lay that out first; we build it as we build the academic schedule. And then we keep going back and forth and back and forth and back and forth and back and forth until we do the best that we can for the overall school. Generally, that process is completed with a representative group in the school. There'll be a teacher from every grade level on the scheduling committee. There'll be a couple of special service providers who have intimate knowledge of the services and how the staff are shared across grade levels. There'll be somebody from encore who participates in the process, and it's negotiation that occurs as the whole schedule is developed. You have multiple eves on the schedule as it's being developed and so you usually end up with a better product when it's done that way.

So...let's play with it a little bit. That's the cover of our elementary book; we're quite proud of it. It's got 12 chapters; the first one is sort of an intro, the second one is on basic master scheduling, third one's on encore, fourth one is special services, chapter five is on departmentalization, six through eight are on parallel-block scheduling, and the remaining four chapters are on instruction within the schedule on the planning process.

So...if I'm in a typical elementary school, and a typical elementary school in our country is a K-5 school with full-day kindergarten – that is the typical model although there are a bunch of other ones, okay? But the typical models K-5 will full-day kindergarten. I generally think of my – in beginning to think about how to share staff

across the grade levels - I think in eight periods. Why do I think in eight periods? Well, I got six grade levels, and each one of those grade levels needs a planning slot and an encore block, and my encore teacher need a planning block, and my encore teachers need to have lunch. So that's where the eight comes from. And so, if I had a 400-minute day or even a 7-hour day, I might put 10 minutes before this schedule started - this kind of home room stuff - and maybe I got 10 minutes after it right there, and then I've got eight 50-minute periods, which gives me 420 minutes right there. So, working with a committee, we begin to have a debate. The first question I'd ask is, 'Well, who's going to have encore when? Of course, all the teacher at every grade level and volunteer to have their encore classes in the afternoon, which is not possible. So, we have to debate that a bit. My bias - it's just a bias - is to the younger students in the school, which means that I generally place the younger student's encore classes in the afternoon and the older student's encore classes in the morning. Other people have different biases. For example, I've worked in some places where they put the tested grade level's encore classes in the afternoon and the - you understand? - But I generally don't do it that way. That being said, even though I prefer to have the younger ones in the afternoon, it's very difficult to put the very youngest ones in the last slot; meaning that it's hard to put kindergarten in the last slot because they can't get their tails out the door fast enough at the end of the day if you do that unless there's a big buffer after that class is over. We usually have a debate about it, and often second grade will end up right in there just because I could send them to music with their book bag and they could actually leave from there if we had to - even though I don't want to do that - I've done it. Some of you know what I'm talking about.

It might be that we'll then do first grade right before them and maybe kindergarten before them. I like to keep track – I'm a horizontal scheduler and you'll see in all my schedules the time goes across this way in all the Excel spreadsheets that we use. I keep track of encore in the grade-level line, but also on the encore line. That makes sure that we don't have the conflicts that we've heard about. And I put third grade before them. I might like to get as many in the afternoon as I could to protect morning instructional time. You know, part of the reason that you put these guys in the afternoon is first-grade teachers swear that kids can't learn how to read in the afternoon. I don't know any research that says that, but they're a tough nut to crack, I tell ya'. Then I might leave an opening for the encore teachers to have lunch, and then we might go fourth and fifth, and I sometimes like to have the encore teachers plan first thing in the morning, and that's not really because I'm trying to let them get set up for the day, it's because I like to preserve that first morning period for everybody to be in class.

Now, there are two times when I don't do that. What are those two times? Well, one of the times is when I have the cafetorinasium problem. You know what I'm talking about when I say the cafetorinasium problem? You're eating in what you use for the gym. If you've got that problem, you're usually putting the encore teachers planning time in the middle of the day next to their lunch time to try and open up the place where you

eat for as long as you can in the middle of the day, so you're usually doing that. And the other reason I might do it is because my fifth-grade teachers might say to me, you know, Mike, if you put our encore here, that means we start with 50 minutes of something and we gotta break and then we go on with that, and we'd rather have an uninterrupted language arts or math block, and so just go ahead and give us our encore first thing and then we can have a big block of uninterrupted instruction after that. See what I'm talking about? So, we might do that. But it's, again, negotiated, negotiated with all the teachers that are participating in the process.

So, the next thing – and I need to change this slide – because the next thing I think about is not IE. The next thing I start to do is the academic schedule, but let's just do IE. Notice in this example I've built an intervention period at a different time for every grade level, and that's the most common way that elementary schools do it. The most common way that middle schools do it is the whole school at the same time. The only way high schools do it is the whole school at the same time, okay? We have some choices in elementary school though. The natural home for the IE period is the grade level, okay? We've got a sort of structure that can support its operation, so I find that the most common form is one IE period per grade level, which allows us to take special service providers and they can work in multiple different grade levels in the schedule that kind of makes sense for them; it's not nearly that simple. But, this is not the only way to schedule in the elementary school. I would like to go through about four or five ways that people do schedule this period and then we'll spend a good bit of time talking about how it gets used. But, the first thing we are going to focus on is on how it's scheduled. So, let me get to the right place here.

You have one of the handouts; it says IE periods. If you've got it on your computer or you printed it out, it looks like this. It's a PDF file, and if you printed stuff out you have something that looks like that. It starts with figure 4.1. I've worked with all the elementary school in Prince William County, Virginia. There are 58 in the county, and of those 58 schools, three or four have decided to have IE period all at the same time for the entire school. I'm showing it at the end of the day here, which I don't think is a good idea, but I'm just showing it here. You might wonder why they would do that, so I asked them. I said, 'How come you do it all at the same time?' Well, the principal said this, 'Well, there's a unanimity of purpose in the school at that time. Everybody's doing the same thing at the same time, the same kind of intervention or enrichment type activities: it's easy from an administrative standpoint for us to supervise it and monitor it, and everybody is on the same page at the same time.' That's one reason. The second reason they said is, 'our encore teachers, if we get their planning some other time during the day, we can use our encore teachers to provide some of the enrichment activities at that time, and that will help get our group size down some.' That's the second thing they say. The third thing they say is, 'We can do some multi grade-level regroupings if we want to if we have it all at the same time.' The major negative of doing it and the reason it's done so infrequently in elementary schools is because each one of

your special service providers can only work with one group at that time. So you don't get the mileage that you need from your special service providers – whether it's a reading specialist, learning support person, or whatever it might be – you don't get that sort of mileage. I don't find this done very often.

The next one that's in that same package shows two IE periods per school. These two IE periods, one for the intermediate grade levels, one for the primary grade levels – I don't do this very often either; only a couple of times have I done it, and it tended to be in a small school that was rural that had maybe one class per grade level and that had part-time people who were doing the interventions who only came in the afternoon or something like that. You had to cluster grade levels at the same time to do the intervention time because the people weren't there that long and so that's why you had to do that. So this one, which has three grade levels at a time in intervention and the next one, which has two grade levels – 4/5, K/1, 2/3 – at a time are basically I've found for smaller schools that share intervention and special ed and Title I staff across buildings on a part-day/part-day kind of basis, and I don't use them very often, but there they are.

The most common, again, is the one where we have a period for every grade level, which I showed you. But, you know, a period for every grade level isn't enough some places. If you think about the services that we would like to provide during the IE period, you know, some of them have so many kids who need the service within a particular grade level, there is no way they can provide it to all the kids in the grade level in one period. Speech/language: Think about kindergarten and the number of articulation groups the speech/language teacher might have in kindergarten; it would be pretty hard to get them all done in one 45-minute slot in a day for kindergarten. So, sometimes what we find is necessary in terms of scheduling the IE period is to have multiple IE periods, even a separate one for each class in the grade level we've done, although that has problems. So, if you look at this, there's a separate IE period here for one teacher, another teacher, they each have a separate period. That's a limitation in other things that we're going to talk about related to the IE period, but we couldn't just let these teachers when they were going to do everything, though, because we couldn't provide the special services appropriately.

The next thing that our reading-recovery teachers did is they worked with small groups in first grade during the IE period. So we actually divided the first grade into three chunks for IE; two of the teachers had IE here, and the reading-recovery teachers plus other special-service providers could work with those classes here. Two of the teachers had IE here and one of the teachers had IE here, and you can see we have the reading-recovery groups right here, and we've also made sure – if you look at this schedule here for second grade – the two second-grade IE periods do not conflict with the two kindergarten IE periods, do not conflict with the three first-grade IE periods, and

you all know why. We've got to create a schedule that allows...and then that IE schedule can be the schedule for some of the pull-out type services that are provided either in Title I or learning support or speech or related services or anything like that. I know your eyes have glazed over by the end of the day with some of this stuff, but you've gotta have – it's a visual depiction – is this making sense?

Now, in this case, what we've done is we have divided...if you were to go down to the fourth and fifth grade, we did kind of the same thing, too; it's down below here, you know, third, fourth, and fifth. Third's have two IEs, fourth has two, but the fifth only have one, but it was longer. The reason the fifth had one that was longer is because in the fifth grade we were running instrumental music out of there. The instrumental music teacher was only there that period, and she needed to pull across all five of the fifthgrade classrooms, so they couldn't have a separate IE period or she wouldn't get her lessons right. Are you with me on that? You know what I'm talking about. We'll talk more about instrumental music later.

Here we go! Next, version of the schedule that...and you don't have this one because I just added it this morning, but if you want it I'm happy to give it to you. This is in Ramapo, New York. Ramapo is in Rockland County across the Hudson River from Westchester. You might be interested to see, these are their time allocations in this particular school - let's just blow that up a little bit so you can really see it. Their philosophy in the...notice how they kind of have an integrated philosophy the way that this is allocated. We created a different sort of structure for their time. In first grade, they had language arts and social studies was lumped together for 120 minutes, and math, science and world language would be pulled out of the math/science block. They had regular Spanish classes that occurred 20 minutes every – I don't know, we'll see in a minute. But you see, they didn't break out science and social studies separately because their philosophy was interdisciplinary one, so that's what they did. And in the fourth and fifth grades they had a departmentalized version, and so language arts and social studies equaled math and science and the two blocks had to be equal to build the schedule right because it was two-teacher teams flipping groups. Are you with me on that? You know what I'm talking about? So that's the way that was. But look at this, look at first grade, second grade, third grade; 60 minutes for IE. This school is one of those schools - and if you work in special ed you know the kind of school I'm going to tell about now - if you build it they will come. So, they are well known for the provision of fine services for students with disabilities, and so they come, and they move there purposefully, and you know what I'm talking about. So some of these schools had a fulltime OT person, a full-time PT person in the building, you know, and they all had fulltime speech/language people. There were piles of related service people and a lot of kids who needed those services; big internal music program, pretty big gifted program, and we needed time for those for services. They were willing to give up 60 minutes a day. Now, to give up 60 minutes a day, my philosophy of the IE period is the longer it is the better it better be. You know what I'm saying? Because it's a trade off. You're taking

time that could be core instructional time for IE. And in the construction of the schedules at this elementary school, Viola, we pretty much had to start with the IE periods first because we wanted to have non-conflicting IE period for all six grade levels. So, if you look here in the yellow, here's fifth grade, here's fourth grade, here's first grade, here's second grade, here's kindergarten, here's third grade. I mean that pretty much eats up the whole day, so we had to kind of leave those out very early to make sure they wouldn't conflict. Now a special service provider wouldn't work all of those periods every day, but they had access points built into the schedule where they could grab kids if necessary. Making some sense here, okay? And actually, what we did, we had a speech/language person, a PT person and a school psychologist sitting in the room building this. There's their world language schedule. What were they getting. AC day, BD day, 20 minutes every other day, first grade 30 minutes every other day, third grade, fourth grade and fifth grade; second grade was in the 20-minute range, too; they got it every other day. That was their world language schedule.

One of the things we did was built a special service scheduling template for pullout type services. These are the IE periods on here, and they were kind of on an eightday cycle that the special service providers were going to work through in terms of providing their services, and these were their access points. It was sort of the basic scheduling template they could use to fill out and gave them a way to think about the kids they worked with, the groups they worked with and all that. This is far better than running around to every teacher in the building and asking when you can have people. What had to happen, though, what has to happen in this kind of a case if you look back at the schedule is that all the special service providers who serve fifth grade have to get in the room with the principal and their list of students they serve and fight it out over who gets whom when, you know, because there were multiple services provided and if a kid was in instrumental music and got speech and got...you understand? So the principal would mediate - he's kind of the marriage rep in there - in between these special service providers as they create a schedule. But the classroom teachers weren't necessary in that meeting because it was coming out of their IE period, and they just had to be informed.

Question from the audience couldn't be heard. Mr. Rettig's answer: Oh, yeah! That gets built now. Do you know high school scheduling? The high school scheduling calendar pretty much any curricular changes that have to be done in a high school are done in the fall because they have to build their registration booklets by December because they have to have their forms out to kids in early January because the kids have to do their registrations usually in late January or February because the course tallies have to be to the schedulers and the departments so they can decide what classes they're teaching in March. Most good high school's schedule is done in May or June, pretty much even though there are some revisions based upon failures and stuff like that. You know, over the summer. I would argue that the elementary school's schedule time table doesn't need to be quite that severe, but certainly by the end of school, you ought to

have a pretty good idea what the basic format, yeah...these were all done before the end of the school year or maybe in very early summer. Do they then sometimes change a bit based upon the change and the population and our loads? Sure, but you've at least got it pointed; you're not trying to create it during the first month of school. You've got a basic template, but we make changes to it.

You know, the IE period – I've been focusing on that because it's an important piece of the schedule. It's not the inclusion of the schedule either. You know, that's a different piece of this. I will show you schedules later on where we have a teacher who does a mix of inclusion and kind of IE support which, to me, is kind of a really good model. It's where I can see kids in a co-teaching model and also in an IE period. That works very, very well.

These are the versions. These are the basic ways that people approach it. One period for the whole school. Two periods for the whole school. Three periods for the whole school. One for every grade level, multiples for every grade level, okay? And the multiples for every grade level come in two formats, one where the whole grade level has two periods, and they are at the same time and the other one was the D.J. Montague where the grade levels split in half, and half has it one time and half has it at another time, okay? So those are the kind of scheduling formats that the IE takes.

Question from the audience could not be heard. Mr. Rettig's answer: They are 60 minutes; they are two 30s right there. Right, two 30s. We give some sort of assessment and analyze that data, and then we're what I'll call tiering out the students, dividing them into groups and planning for the instruction that they're going to receive during the IE period. We provide a mix of intervention activities and enrichment activities for students, and over the course of a period of time, whether it's six weeks or nine weeks or whatever it is between our different formative assessments, we monitor students and move them back and forth between these intervention and enrichment activities and then we kind of re-tier after a period of time. This is just one way to think about it. I'm going to use, probably, language and terminology that doesn't fit exactly with what our TI uses, but these are my definitions for the moment.

Tier 1: Our students who can learn the basic curriculum through the typical instruction given in the allocated time by the classroom teacher with differentiation that occurs in the classroom but no extra time is necessary for them to learn the basic instruction. Is that clear what I'm talking about? They don't need an intervention; differentiation within the classroom is sufficient for them to learn the basic curriculum.

My tier 2 students are those that need periodic intervention, not all the time, but they have trouble with a concept once in a while, and they need help with that and some additional time at the times they're having difficulty, and a timely manner would be good. They ought to be receiving enrichment activities when they are not getting intervention.

Then for me, and some people would say this is tier 4 – by the way, these students generally are served during the intervention period by classroom teachers providing enrichment activities – these kids might be served when they're in enrichment by classroom teachers or intervention by some classroom teachers or in an intervention by special service providers, but usually not a special service provider. These kids right here generally need long-term, intensive intervention and often don't receive the enrichment activities because they need so much intervention, and those interventions are usually provided by special service providers. That's kind of my definition.

Let's go through – I think there's kind of two basic approaches in elementary schools to organize the intervention period. The first one I call is the Center's approach. It's commonly used in the primary grades because, well...here's how it operates. Here's my three first-grade teachers right here. During the intervention period, you set up enrichment centers in your room, you set up centers in your room, and you set up centers in your room, okay? Your tier 1 kids who don't need any extra help are rotating through those enrichment centers. You're at your desk or easel or table and you're pulling small groups or individual kids to your desk to provide tier 2 type intervention, somebody had trouble with something in class today or yesterday, and you're working with those kids and supervising centers at the same time, okay? And then your special service providers that are serving the grade level at that time pull out kids across your three rooms, and they're serving them at that time. That's a pretty typical primary grades model, and it fits with the culture of elementary school, especially the primary grades, which is basically...I have my kids, you have your kids and we don't mix them up together very much. I got my babies and you got yours. So that's the way it is.

There's two weaknesses to the Centers model. The big strength is it's easier to put in place. The weaknesses, you've got a kid who is having trouble with diagraphs, and so do you and so do you. It sure would be better if one of us did some good lesson with that with those kids and the other guys did something else. So, we could marshal our resources a little bit better. The other big weaknesses, how good are those centers as enrichment activities? Know what I'm talking about? How good? You know, I was a first-grade teacher, I had centers in my room, and I worked hard to make the good. But their primary quality had to be kids could do it by themselves without bugging me because I had other stuff to do, Okay? You know what I'm talking about. So how good an enrichment activity can that be? So, never good in my experience.

So, the other approach is a regrouping approach where a team of teachers regroups and takes on different roles during the intervention/enrichment period, and I'm going to sort of talk through an example of what that might look like, not a perfect example but it just is...we'll see what you think about this idea. Let's say we have 100 kids in third grade, we'll say. We're in the third grade, we got a hundred kids and we got four classroom teachers, all right? Four classroom teachers, 25 kids in a class we'll say. Let's say Connie used an RTI typical standard set. In that group, about 80% of our kids are kind of tier 1 kids that don't need much in the way of intervention; that's the number we usually use, somewhere around 80%. In some schools it's more, in some schools it's less, but I want to use 80 just for this particular example right now. So, I have 80 students who are kind of in the tier 1 range who need an enrichment program. Now, the first thing is, what should be the goals of the enrichment program? To me, the goals of the enrichment program should be to take those kids higher, faster, farther and, you know? And to help them go from being proficient on your state exams to advanced proficient; from being threes to fours, from being, you know. And the enrichment program they should be provided should be full of higher order thinking skills and all that because they need to make a year's growth, too. By the way, this is the weakness of RTI in my mind; we don't deal with enrichment in it enough, okay? And part of the reason it gets criticized because it is all about the interventions. Well, you've got 80% of your kids that don't need that. Do this right, you'll do a better job on the intervention, and you'll get less criticism for it. The first thing, I look at that number of 80 that needs enrichment, I think to myself, what is the least number of adults I can put in charge of that group of 80 and get away with it, okay? I look at two, and I say no, 40 per, that's too big. I look at three, and I think, yep, I can get away with it. Three would be 26 or 27 in a group, so I think I can use three people. Then I think, who are the three people? I got my four classroom teachers, but I'd like to hang as many of them back for doing some tier 2 type interventions if I could. So, I look around the building and see if there is anybody else who might do part of the enrichment program. Maybe I have a teacher of the gifted. If she were there all the time, maybe she could work in this period and do some of the enrichment. That would mean I'd only need to use two of my classroom teachers, and I could use the teacher of the gifted as the third one. Maybe my librarian is not in the encore schedule and I could use her. Well, let's just say we don't have anybody else, because most places wouldn't. But I'm going to take three of my classroom teachers so I am going to have groups of 26 or 27 here, my kind of tier 1 kids, and so it would be like 26 or 27, I think it gives me 80.

But now what are we going to do with them? Well, we've got to have a plan for enrichment. It shouldn't just be every grade level and every teacher make something up on their own that's enrichment. There ought to be a planned out enrichment program that is tied into our state standards and especially the higher-level thinking skills that are in those state standards and will help take these kids to that next level. So, I guess one way to do that would be...let's say I have somebody who really loves science. I might have one of my classroom teachers – by the way, my belief is that if we've got five schools in our district and we're all running intervention enrichment programs, we ought to get the third-grade teachers together across the district to design, maybe with the help of the gifted teacher, those enrichment units. Then we could all use them and we wouldn't have to plan everything out on our own. Does that make sense? I know, it's a curriculum project, but it's a pretty good one. And then, because otherwise, we're just all making up stuff to keep these kids busy while we're doing the interventions, and it's not particularly high quality.

We might decide at the district level – oh, next thing is how long am I planning for here? Well, I might be planning for ... kind of depending on when our benchmarks are given. If we're on a nine-week time frame, you know, we have nine weeks, so maybe I'm planning for nine weeks or six weeks or 12 weeks. I don't know what it is, but let's say it's nine weeks. I'm going to plan a three-week science unit, and that science unit is going to be chock full of charts and graphs and reading and writing, good integrated with lots of other skills above and beyond the basic science curriculum. This is not the allocated science time; this is the IE time. The basic science program is taught during the science and social studies time; this is above and beyond that with lots of higherlevel thinking skills. Three-week unit. Then I might ask somebody to do a three-week social studies unit, same drill chock full of higher-level thinking skills, reading, writing, charts and graphs, maps integrated if possible. Let's say we're going to have a special writing project that would last for three weeks, too. I'm thinking they're the three most common. I don't get to make these up, though. You and your school division get to decide what's important and what those units ought to be and what they ought to include. But, if I did that and the kids in these groups rotated through each of the three units over nine weeks, I would have taken care of this 80 kids for the next nine weeks in terms of the enrichment program. Then we need kind of four chunks for these a year to make it fill out the entire school year.

Now, I have worked some places where they do shorter units, they have a week of data analysis where they're not running these units and they're doing something else; you create your own calendar for it. Something like this makes a lot of sense to me, and I would say the kids that are mainly participating in this are those tier 1 kids and the tier 2 kids who might occasionally be pulled out of this to get some assistance. Now, who's giving them their assistance? Well, I had four classroom teachers. I had one classroom teacher left; we've got her. Who else do I have? Maybe I have a learning sport person, okay? Maybe there is a learning sport assistant; some places would have that. Maybe I have a Title 1 teacher and maybe there's a Title 1 assistant, might have that in some places. I might have an ELL teacher that might be able to serve during this time, and I mean there's a number of different people that might be available during that time depending on what kind of sports you have in your school. Well, I've got 20 kids left here and probably a few others that get pulled out of this every once in a while because they need help, and I've got all these people to serve them during those times (inaudible). Does that make any sense?

Let's move on though. We will see other examples of how this is scheduled and I'll talk about other ways that people have done it as we move on.

Yes – question.

AUDIENCE MEMBER: You were saying that leadership is so important. How important is it at the top of the district level compared to the building level? I work at an IU and we're helping schools start this project for scheduling and I find that principals are finding the time to put the IE spot in, but we need the cooperation of the districts to say yes, all specials will be that time, and we're not

MICHAEL RETTIG: You mean all support services?

AUDIENCE MEMBER: Support services.

MICHAEL RETTIG: You basically need support at all three levels: the district level who find resources and more often the authority, the school-based level the principal and the teachers, too. So my work typically begins at the district with a team of central office people, principals and teachers from their buildings. That's usually the study group that starts, you know, teams from each building, central office people in charge of the various areas and the principals are there, too.

Let's go on. You've got an IE period built in our schedule forum. You've got it working smoothly, well now you zap once and recess in there, easier said than done. And again I probably wouldn't do it this way if I were doing it I would need to redo this slide. Let me just talk about lunch and recess for a moment.

Fifteen years ago when I started this work I used to recommend that some kids actually have a recess before lunch and people looked at me like I'd lost my mind, okay. Now there's several different health organizations that recommend that kids have recess before lunch, especially the little ones that will actually eat their lunch and rather than just run outside as soon as they can after gobbling down a few bits. Lunch is not nearly as cleanly blocked as I show here, and everybody who does a schedule knows you kinda gotta slide it in and slide it out; but one of the things I try to do is to not ever box lunch and recess with two immovable chunks of instruction on either side of it. For example, when encore's right here lunch and recess can't wiggle into encore.

If IE were on the other side of lunch here it would be trapped there and there would be no wiggle room at all, okay, and so I don't want to box it in too much. I mean, lunch is a problem in schools based on facilities and supervision for recess and the lunch room and all that and every school has it's own idiosyncrasies in the lunch program. You gotta make it work, but I still don't like to schedule around it I like to schedule academics and schedule lunch and recess where it fits well there. But let's get on with this example.

That would leave the rest of the time available for core instruction, and I use this to illustrate a few things about school scheduling. If you look at the first grade schedule right here they probably like that, 150 minutes of uninterrupted instruction. They have recess and lunch then there's 100 minutes there and probably some math, science and social studies, they've got their IE period right here, I think first grade teachers kinda like that. They might want to do something. The second grade though, whoa. This I use to illustrate two principles of school scheduling. The first principle is not all teachers in the same grade level agree with each other, okay? Meaning that I met a teacher in New York who looked at that and said "that's the stupidest thing I've ever seen, how could anybody do that? You have to have a break in the middle of that, you've gotta change it, it's impossible." Then I'll have another second grade teacher who will look at this and she'll say "Hmmm, you mean I would be done with core instruction by 12? I think I'll give them a 5-minute stretch break and we'll roll with them and so that would be okay." They don't always agree even at the same grade level.

The next thing Griswall is illustrating here the domino theory of school scheduling, okay? For example, maybe we decide they are going to change the second grade schedule. What can we do to improve it? Well, I might decide to move their IE period. At least if it's regrouping allow the kids could get up and move and move to another teacher perhaps during that time and I could put a core block in there. Well, if I'm using the same special service providers in the second grade as I am in kindergarten I've just created a conflict in my schedule for those people who provide their services. This is what I mean by the domino theory of school scheduling. It's not all just about you, okay? If I move something from one grade level it means I'll probably have to move something for another grade level; but sometimes your idea can be good for both. I would argue that my kindergarten probably wouldn't mind a bit if I did that and gave them a longer morning block, probably. It's the whole eves on deck notion of scheduling, too. Some people see different things and they bring their things to the table so if you have a team working on it, it's messier, it takes longer but it works better. You end up with a better product and more ownership of the product in the end; and also if you're doing it in a team basis you end up with emissaries out in the faculty who can explain the compromise that was made that you're not particularly happy with.

Yes.

AUDIENCE MEMBER: Alright, you're already in an elementary school, you've got five first grade, second grade, third grade, fourth grade and fifth grade teachers in this school and . . .

MICHAEL RETTIG: The perfect five-top school.

AUDIENCE MEMBER: You've go a principal and you're doing this and you're doing it sometime between the end of PSSA and the end of June, because you're building your schedule for next year, when you're working within the existing schedule how many different . . . you're going to have a first grade teacher, a second grade teacher, a third grade teacher on this team? And when during the school day are you building this schedule?

MICHAEL RETTIG: It might be in place of a faculty meeting, we do some time there. I might release them with subs to do this. It doesn't, I mean it might just take a day or less depending on skill of whose ever manipulating the schedule.

AUDIENCE MEMBER: What if the principal is not you? What if the principal is like doing this for the first time?

MICHAEL RETTIG: They do it at faculty meetings. They are able to get close together and also just being offered the chance to participate in the process will be amazing to some teachers who'll stay late and work on it. Plus there are people in every building who have the scheduling gene and love this stuff and will do it 'til midnight if you let them, okay? I never had trouble getting people to, hmmm, there's a committee out there. You do need representation. Anybody done this kind of thing?

AUDIENCE MEMBER: Yes, just not on the whole thing. What got to this building, I've asked you to very informally, the biggest nightmare without a doubt, pull outs, pull outs strike, I don't have all my kids. So, right then if you say, and this is all I did, I'm going to look at the schedule anybody want to help? Oh my God, I'll do it, I'll do it, I'll do it. We have hands going up all over the place.

MICHAEL RETTIG: Sure, sure.

AUDIENCE MEMBER: I realize what I said as far as getting everybody in I came up with two or three ideas and gave it to them and then from that those ideas would go, we would go with the schedule we currently have. I didn't just say run wild and start from square zero 'cause . . .

MICHAEL RETTIG: And that's not bad. That is not a bad idea to have. Here is some potential on what do you think, how could we improve these. It moves the process along some if you kinda come up with a template or a draft that people then critique and you can change from there, that's not a bad way, and it speeds up the process, too.

Yes?

AUDIENCE MEMBER: I would be considered some who is imbued to you. I know the favorite specialist and 2 years ago when we went to other guy, kinda roll out meeting for RTI, when we came back to discuss it with the district, the concern was we don't have the people for this. When you start a schedule, if you don't start it just to make new schedules but what they guide in principles, they answer certain questions, they meet a certain need, something that the rest of the faculty is motivated by. It will continue to roll and I did stay up 'til midnight and I'm someone who goes to bed at 9. But I did a first through five, five encore for practice and it was really, I just wanted to call it the bingo card schedule 5 x 5, and I got it done overnight and then it was tweaked a bit after that; but it was because someone said we don't have people who are RTI and that's way we approached it and if you do it this way with IE block you can find the people and if that's what they are motivated for they will continue it, if just use a new schedule perhaps the behaviorist part of me thinks that people won't necessarily stay on board with that.

MICHAEL RETTIG: Usually the way a district starts, if they have a study committee and they create a new framework for their elementary school schedules is "okay, what're we doing now, what's wrong with that and what's right with that, and what would be perfect?" They're not going to get perfect but at least they develop those principles that you're talking about in that kind of discussion. What do we do now and what's wrong with it. What do we like about it, do we want reserve and what would be great in a perfect schedule, how to help us do that. Then you try to meet those goals in the developing the schedule.

Yes?

AUDIENCE MEMBER: Is this like a 5-day, like Monday through Friday schedule?

MICHAEL RETTIG: We're going to talk about Encore rotations right now. I am going to segue right into Encore rotations right now because there millions of different ways to do it.

You have a quick question now?

AUDIENCE MEMBER: Inaudible

MICHAEL RETTIG: The IE model is a double dose model, so it is for pull out type services and in an inclusion model we are going to put in core instruction. I'm going to show a schedule that's been developed with a combination of two things. What I didn't mention—

Here's the three kinds of models I look at. Inclusion which involves co-teaching, a kind of pull out model that comes out of the IE period and then replacement instruction, which is sort of a self-contained special ed model where they get their actual—and different states use different terms for those, and I just, it's pull out, it's co-teaching and it's replacement instruction where they don't get what the classroom teacher gets they get it from a special ed teacher.

Some schools have very little replacement instruction, very little. It's all co-teaching and kind of pull out support and double dose support, but some schools still have a fair

amount of replacement instruction. We'll talk about how those things are different and how they can be scheduled different.

Right now we're focusing on ongoing. As we build our, we've got a little schedule right and an Encore block for every grade level. But what's in the Encore block? Well, there's all sort of rotations one could do.

You know I forgot, when I was criticizing schedules earlier there were a couple of points I forgot to make about Encore scheduling problems. One problem was the unequal length periods. The second problem was the one class after another after another. The third problem is our over reliance on Monday-Friday thinking for scheduling of Encore. What do I mean by that? If my art class is scheduled on Friday, my kids more art than anybody else except somebody who might have it scheduled on Monday, because we tend to have more workdays, holidays on Mondays or Fridays than we do any other time. In fact, we looked at the calendar in Gilton County, North Carolina, one year and discovered there were 11 fewer Mondays than Wednesdays on the calendar, which meant if I have art on Monday my kids missed a third of the program compared to some of you who have Wednesday. We would never allow that to happen to reading but because it's just art it's okay. I don't think so, okay?

The solution to that is to move away from the reliance on Monday-Friday scheduling to some kind of rotational schedule and in rotations I've used just about everything, 3 day, 4 day, 5 day, 6 day, 8 day and 12 day, all kinds of rotations where you roll over the weekends, roll over the holidays and you just schedule by day of cycle.

How many of you are on the cycle system vs. Monday-Friday schedule? It's about half I think. Let's talk about how that kinda works.

By the way the fourth problem in Encore scheduling is one schools don't control over because it's the way the school gets their itinerant Encore staff from the central office, that can be a major bugaboo. Here's what I mean by that. If I'm a five-top school as you described, five different grade levels, which nobody basically is a perfect top school, right. I call it top. The number of sections per grade level. Say I were a perfect five-top school, five different grades. To get comp and planning time every day in my school how many Encore teachers do I need in the building every single day? Five. If you give me six on one day and four on another I'm screwed. You understand what I'm talking about. You can't do a good schedule that way. We need to try, I've gotta get 'em that way so they have same number that will cover those classes every day. There is a way that I tend to think about a school division as one big school. I just worked with Roanoke City Schools. There 48 sections in the second grade. They are basically a 48 top district and I could look at that whole district and create a rotation for it and assign staff to it as though it were one big, big school, the way you kinda gotta think about it. We will go through and think through smaller and then build it up bigger in model.

Imagine my school that I've been working with here is a perfect little three-top school and you know have three sections per grade level. I might decide to do a rotation that would look something like this. Scheduling is all about creating patterns, repeating patterns in different ways. My pattern is PE, art and music. I slide it over one PE, art and music, I slide it over one PE, art and music.

First question. You have an 180-day school year, how many PE classes would every class get? 60. How many art classes? How many music classes? 60, okay? In my perfect little three-top school what would I need to staff this schedule in PE, art and music? One teacher in each area, okay. I need one teacher in each area. Now if we go back to my little schedule, well we used my master that I created earlier, which you have here. If you look at that, if I use that rotation in the master I created earlier this would be my Encore teacher's schedule. The teacher would work with one class in fifth grade while the art class teacher has another class in fifth grade while the music teacher has another class in fifth grade on day one and we just rotate through each of the days. That would be their schedule. If I were a PE teacher I would plan to work with the fifth, the fourth and have luncheon duty then work with the third, K, 1, 2 every day that would be my schedule, okay? That's that.

Now what does this rotation communicate about relative value of PE, art and music? They're equal, okay. They're equal. Now it's been my observation that is not the belief system that is utilized in many school districts around this country because one of these areas has a really strong lobbying group who has been messing around the State Legislature. Which group am I talking about here? PE. Music and art people getting killed by people right now. They are because you go to some states there is minimal minutes of PE being required at the state levels. I've seen, I don't think you have as many as 150 minutes a week in North Carolina and placed like that for PE, which is really interesting when you try and do when you have a problem. You don't have a big enough gym for it or enough staff to provide it and the states cut your funds. That is always interesting.

Now, my next question is if I have a 6-top school and wanted to provide this rotation, a six-top school and wanted to provide this rotation, how much staff would I need to run it? Two PE teachers, two art teachers, two music teachers. Well, that's kinda funny. You mean I would need to have two music rooms, too, and two art rooms, too? If I wanted this rotation in a six-top school then I probable would. Scheduling stakes are directly related.

Some of the most interesting work I do I work with two architecture firms, one in D.C. and one in Virginia, and what I do is work with the school people to design the educational program. The practical manifestation of their educational program is a schedule from which we know what kind of rooms we need. To build out in enough detail. I've been involved in about 10 building projects now that were really fun. When the building projects got built out of the schedule we created for the educational program. I'll show you those later this afternoon, a couple of them.

That was an easy question. Here's a harder question. If I'm a four-top school and I want to run that cycle what staff do I need? One and a quarter? Somebody always says just make a 4-day cycle and add library, which would work but it wouldn't be that rotation. Okay, my question is what staff do I need to run that rotation in a 4-top school? One and a third. I need an extra day of art, an extra of music and an extra day of PE. Because my core 3-C teacher down there would need one period of art, one period of PE and one period of music. One and a third, that's odd.

Now what size school would I want to marry my four-top school with to share staff to use up that person? Aahh. A two-top school. You see if I marry my four-top with a 2top they'd eat up the other 2 days of their schedule, are you with me there? This is a principle that I have for sharing staff. You want the marriage to equal the rotation or a multiple of the rotation. The rotation is 3 days, the multiple of the rotation is 6, 4 plus 2 is 6. They would be full, okay? That's something. I can multiply that right down a whole school division. I can run that right down a whole school division if we come to a rotation agreement.

Let's look at some other rotation stuff. This is just one. This next rotation is one that I've used several times. It expresses a different value, PE/art, PE/music, PE/library. What's more valuable? PE, sure in this slot. Kids gets three PE classes every 6 days, one art, one music and one library. Now the question is, what do I need to staff this in PE, music, art and library in my three-top school?

AUDIENCE MEMBER: Inaudible

MICHAEL RETTIG: What do I need in PE?

AUDIENCE MEMBER: Inaudible

MICHAEL RETTIG: How many teachers do I need on day one?

AUDIENCE: One.

MICHAEL RETTIG: How many on day 2?

AUDIENCE: Two.

MICHAEL RETTIG: I need 1.5. Here's one way to look at it. Look at this. Here's one teacher, see that. This would be every day and I need 3 extra days out of 6.5 FTE, full time equivalents. Another way to do it I need count, 9 days of PE in 6 days, 9/6 1.5. That's what I need right there. What about art? What do I need to staff this in art?

AUDIENCE MEMBER: Inaudible

MICHAEL RETTIG: Half an art teacher, only 3 days. Now this . . . and do I need in music to staff this?

AUDIENCE: Half.

MICHAEL RETTIG: Half. What do I need in library?

AUDIENCE MEMBER: Inaudible

MICHAEL RETTIG: Three days of half. Maybe half of her time, maybe she fully in my building full time but she is only scheduled half of that, I kind of like that. Some schedule library's time and some likes library time, it's a good thing.

Now, what size school would I want to marry this school with to share staff? What size school would I want to marry this school to to share staff?

AUDIENCE MEMEBER: Inaudible

MICHAEL RETTIG: A three-top, right. Because when the art teacher is in my building who would probably be in their building? The music teacher, we flipped, okay. What days would the other schools get the extra PE teacher?

AUDIENCE MEMBER: Inaudible

MICHAEL RETTIG: Day 1, 4 and 6, the days that I don't need them. And we build two rotations together. Is this making some progress. It's the way you think about it across multiple schools. One last thing in this topic and then we are going to look at a sample study.

Here we go. Here's a four-top. PE/art, PE/music. But you know, Mike, I'm not a perfect four-top, we like smaller class sizes in kindergarten and first grade. I have five down there and you called me a four-top and I only have four on board teachers in the building what am I gonna do? By the way I got only three in fifth grade because we let the class size go up there bigger. Am I right, that happens all the time doesn't it?

Now I suppose if I had five in first grade and three in fifth grade well what're my possibilities. I could take the fifth one in first grade and I could stick it into the open slot in the fifth grade schedule but what bad thing would I have done? No planning times, no common teaching time or special service providers to do the schedules. I don't want to do that. I could run a teacher over here for one period to teach that extra class, one of PE, one art and one of music seems kind of wasteful to do that but it's done all the over the country. Or I could do this. I could take my, by the way in third grade I've got 100 kids and four teachers, for the first grade I've got 100 kids and five teachers. That happens all the time doesn't it? Because we keep the class sizes small down there. Why do we have more teachers in first grade? Is it to have smaller PE, art and music classes? It's to have

smaller language arts and math classes. Why couldn't I just take one of my first grade classes and divide it up among the other four during the Encore time if they all go at the same time and allow a little bit bigger Encore classes. Any of you doing that right now? Does it work, it works. Get a little fussing from Encore teachers? Yeah, but it works. It preserves the comp and planning time.

You don't need to run somebody over, you keep—everybody understand what I just said there? Now is there is a limit to the numbers you will allow can do that? Of course, there is. By the way, that limit varies all of the country. Some places have both they're running classes sizes of 15 to 18. If you give them more than 20 in an Encore class you get run out of town. I also work in Las Vegas where the staffing is so terrible there they'll allow eighty kids in PE with one teacher with 1 teacher's assistant. I know. I taught school long and I'm happy about that.

It's crazy but it varies all over the place but that notion of dividing one class up is not unusual. So I have--let's go. Let's look at an example of a full school schedule and then we'll stop here and go to lunch.

I work with Prince William County Schools and with all 58 of elementary schools but it started with 10 and the 10 that I started with, piloted common planning times, common Encore rotations, the IE period and time out occasions. They were so happy with the scheduling that we did and what it did for their schools that the division of the school district decided to do it for the entire school division all of these 58 elementary schools. We got together a committee, pilot school members, non-pilot school members, administrative teachers and central office folks to deal with the ying and yang of the elementary scheduling framework. What do I mean by the ying and yang? The ying was we must be the same in these ways and the yang was we may be different in these ways.

It is a graphic to illustrate lots of things that happen in school districts not just the scheduling. There has to be this sort of thing okay. Where do we decide with gotta be the same, time allocations. This school district they agreed upon these time allocations. You will notice 390 minutes, and 120 minutes in language arts, 90 minutes in math here. Notice that we reduced the language arts and math in third through fifth grade and gave them more science and social studies time. That is very Virginia. And the reason I said it was very Virginia is we test in science and social studies beginning in third grade. That's kind of what drove that switch there.

What else could we agree on? We agree on they didn't come to a common agreement on Encore rotations. In this school division, there were 58 schools, they were all doing their own thing with Encore. There was site based management. The best we could do was come up with an agreement to that at a minimum ever kid would get one period of art, one period of music and one period of PE every 6 days minimum. If you chose to be on a 4-day rotation you had one art, one music and one PE and one repeat or something else. If you chose to be on a 5-day rotation you had one art, one music, one

PE and repeats or something else. If you went into an 8-day rotation now you would have more than one art, more than one PE, more than one music to meet dib, dib.

The third thing they agreed on was they had an instrumental music program but it was strings and it was only fifth grade. How many of you have instrumental music in your elementary schools? Okay, lots. Usually it's the programs in the northeast is the place where they have the most instrumental music and the most typical program I see like in New York is strings begin in the third grade and band begins in the fourth grade, that's pretty common and some places have less. That's the earliest that I'll see. Most of the south and the west does not have it at all. They had strings in the fifth grade, and strings if you think about the way we do instrumental music we're not going to get through this before we have to go to lunch. I'll stop here and maybe your interest will be whetted.

Strings there, the string person will come in a day, day and a half and what do they do? Pull out small groups of violins, violas, basses and cellos all day long out of the fifth grade and so different kids were gone all day long out of fifth grade classes driving the fifth grade classroom teachers crazy, sometimes that's the big test in here. The instrumental music people pulled them out at different times, it was a rotating schedule, the kids didn't always miss the same thing but it really didn't matter to the classroom teacher because somebody was missing all the time and they were having to catch all up. Am I describing the way it happens often? Remember I said it was a music person I believe in instrumental music in the elementary schools they just got the schedule done.

Here's what they decided to do at Prince William high. They said "we're not taking Encore academics anymore. They divided the school district, all 58 schools, into thirds. One third of the schools were required to take the fifth grade IE period and the fifth grade Encore period put them back to back in the first two periods of the day. One third of the schools were required to take the fifth grade IE period and the fifth grade Encore period and the fifth grade IE period and the fifth grade Encore period and the fifth grade IE period and the fifth grade Encore period and the fifth grade IE period and the fifth grade Encore period and the matched to back in the last two periods of the day. One third of the schools had those two periods in the middle of the day.

A strange person would come to your building for two periods as many days a week as it took to get your lessons done in those two periods. They would try to get as many of the kids their lessons during the IP period as was possible; but a kid who needed an intervention during the IE period and still wanted to get a strings lesson we took it out of their Encore time. It came out of their Encore time. Now Encore time is always sacrosanct. You don't pull anything out of there, not here that was our rule. Why was it okay? The Encore schedule, the strings was on a Monday-Friday schedule, the Encores were on rotations, 4-, 6- and 8-day rotations. If you took your lesson out of Encore you didn't miss the same thing all the time. It wasn't like you always missed your PE class or always missed your music class. A strings teacher could work two periods here and then go to the middle school for the rest of the day or work two periods here and then go to another elementary school for two periods and then go to middle school or the high school. You understand what I'm talking about. That's the way we do the schedule.

I think we have to stop, are we there? We're there. We have to stop and we start back up at 1:45. 1:45 at which I will unveil that schedule and many others and we'll get into crazy stuff on the schedule, too. Thank you very much for your attention. I think we have something to be said here.