

This unedited transcript of a OccupationalTherapy.com webinar is provided in order to facilitate communication accessibility for the viewer and may not be a totally verbatim record of the proceedings. This transcript may contain errors. Copying or distributing this transcript without the express written consent of OccupationalTherapy.com is strictly prohibited. For any questions, please contact customerservice@OccupationalTherapy.com.

Size Matters Handwriting Program: A Multitiered Intervention

Recorded March 10, 2020

Presenter: Beverly Moskowitz, DOT, MS, OTR/L, FAOTA
OccupationalTherapy.com Course #4648

- [Fawn] Our course today is Size Matters Handwriting Program: A Multitiered Intervention. Our presenter today is Dr Beverly Moskowitz. She is a nationally recognized speaker with 43+ years of experience as an occupational therapist. As a school therapist, she's serviced more than 15 school districts, visiting over 60 different schools. She's the author of multiple publications. She strives to teach other therapists how to implement AOTA best practices, time-saving strategies, and progressive IDA ideals while keeping the fun going. A creative entrepreneur, determined researcher, and tireless professional, she's also the author of the Size Matters Handwriting Program. This is currently used in every state and four continents. Its concept-driven approach to teaching and remediating handwriting has been proven effective at a 0.001 level of significance in the largest research study ever done on handwriting. In 2010, Bev launched Real OT Solutions Incorporated. Its mission as both a science and product business is to provide consumers, therapists, teachers, parents, and kids with effective, efficient, affordable and fun solutions to school needs. In 2015 she was recognized for her professional contributions and inducted as a fellow into the American Occupational Therapy Association. Welcome, Dr Moskowitz, we are so happy to have you.

- [Beverly] So, welcome, everybody. I am the author of the Size Matters Handwriting Program and I'm excited to talk to you today about how to use Size Matters as a multi-tiered intervention. Again, I am Beverly Moskowitz and I am delighted to be speaking with you. Here's what we're going to cover during the day. We're gonna talk about how to use SMHP and understand its concepts, strategies, and materials. We're gonna describe and discuss the research that's been published and how to employ SMHP concepts, strategies, and accommodations at a tier one, two, or three level of intervention within schools, classrooms, small groups, and individually. So, as was said earlier, Size Matters is a paradigm shift. It is a concept-driven approach. It is not workbook-driven. Every other program out there is workbook-driven. You do not need a workbook. In fact, it's a fallacy to think that you need a workbook for every student,

for every grade, for every year. Nobody has that kind of money anymore and yet you need to teach handwriting. It is not self-evident. Size Matters is not a font. In fact, you can even mix and match fonts. Nobody's going to say that they can't read what you've written because there's a mix of different fonts in there. It is really the consistency of letter size that will make a big difference in the readability of the page. The goal is legibility. So in the eight key concepts, we like to say this is a very meta-analytic approach. We're going to dissect letters. Once you know the concept, the learning curve takes off. You can see changes in children's printing from the beginning of a lesson to the end of the same lesson. Week one, week three, the change happens really quickly. Focus on size, form will follow, that's our mantra. Correct errors in letter size and you will make that immediate difference in the consistency, and therefore readability of the page.

So the first concept is that of writing lines. It doesn't matter at what point in the year you introduce this program. You would draw writing lines on the board and any program that you've already been exposed to has names for writing lines. Size Matters is a very plain kind of program, nothing fancy here, we say to the kids, "If it's all right with you guys, "would it be okay if we call the bottom line "the bottom line?" And then we point to the top line and you may have heard names like the skyline and the headline and the hatline. Again, we're a very straightforward program. I say to the kids, "Would it be okay with you guys "if we call the top line the top line?" And I'm cool with the middle line either being the middle or the dotted line. You wanna establish a uniform terminology for the writing lines because touching the writing lines in all the right places will determine whether or not you've made your letters the right size. Along with this concept is that of go lines and finish lines. Green lines down the left side of the page, the paper, a desk, checkerboards down the right side of the page, the paper, the desk. They indicate the directionality across the page, left to right. Letter lines is the next concept. This is where we dissect letters into their component letter lines, so we have letters that are made of standing tall lines, lying down lines, slant lines, can go

forward and backward, clock lines wrap around an analog clock as if from 12 to six or six to 12. Smile and frown lines move forward and backward, and I often ask the kids if they can find letters that have these lines in it. You will often find kids looking all over the room as if a letter's going to magically pop out of nowhere. This is how you know that all those resources that teachers have put around the room, the posters, the alphabet strip above the board, even the desktop strip on their desk, they've never noticed and they're certainly not using.

The next concept is Super C. So Super C is our superhero. Super C wards off reversals. There are five uppercase letters that are Super Cs. There are seven lowercase letters that are Super Cs and Super C comes packaged with a little extra drama. First we identify what size a letter is and then we say, but not only, and that means it starts with a C formation. The next concept is that of starting points and initial lines. All letters in the Size Matters handwriting program start on a line, okay, remember that I said that. We indicate starting points with a green dot and a little directional arrow and the initial line is the line that emanates from the starting point. So it can be a slant line, it could be as in A, it can be a standing tall line as in B, it can be a Super C as in C. Uppercase F would have a standing tall. Here's a forward lying down, a forward slant. Here's a forward lying down. Here's a Super C, okay, now play along with me. Where would lowercase F start? It's an exception, it starts below the top line. Its initial line is a backward frown. In other words, the letter line is formed in the direction of the go line. It is a backward moving line. How about lowercase E, where does that start? It's the other exception. It starts between the dotted line and the bottom line with a forward lying down line. These are the two exceptions. I don't even bring that up unless I get to it. You got a lowercase E in your name, you got to it, but I am drilling the consistency of size. How about number eight, where would that start and what would its initial line be? Did you say starting at the top line? It's a Super C. The number three starts at the top with a clock line. Lowercase R starts on the dotted with a standing tall line.

Touch points are the next concept. Now, when I say touch points, I don't mean getting really close. Touching means touching. So we count touch points. Red lines indicate when letter lines touch writing lines. Blue arrows indicate when letter lines touch other letter lines. Now, uppercase C is easy to count. It touches at the top and the bottom, it has two touches. B is trickier to count. So you could say, touching, touching, top and bottom, and then go back and do your clocks, touching, touching, touching, and say that it has five touches, and I would be cool with that unless you have a student who makes their standing tall line but they start their clock in the middle. Then you wanna say your clock line has to touch the top line. Or suppose the clock line starts over here and there's a gap, then you wanna say your clock line has to touch the standing tall line. This is a little bit of a gray area. I want you to be consistent with yourself. If you have a student whose letters are unrecognizable, it may well be that the touch points are not there. So don't go crazy on this part.

This little chart here is an excerpt from a larger chart in the therapist manual where we counted up all the potential touches. Just be consistent with yourself. So the biggie is the rule for letter sizes. So we joke that the rules for letter size come packaged in a song and a dance. I'm gonna sing and dance for y'all right now. This is the rule for size one letters. They have to touch the top line. They have to touch the bottom line. They can't be higher, they can't go lower, they can't float in the middle. Ladies and gentlemen, I did not tell you it was a great song and dance. It's a soundbite and you're gonna say it a zillion times a day, so when I do a Size Matters lesson, even if it's the middle of the school year, I teach the rule, I might make a pink box, that's our color for size one letters, and I make a perfect one to point out all the touches and then I make a series of really bad ones. If there was more screen, I could make 20 more errant-looking As. They all look As and I say to the kids, "So, how did I do?" And the kids will say to you, "Terrible," and you'll say, "Why?" Well, they'll say, "It's too tall, "it's too long, it's floating." Finally, touching, touching, touching, touching, touching,

touching in all the right places. Way to earn a star. All of your uppercase letters are size one. I don't care if your kids come to you in 9th grade. Always go back to your size one uppercase letters because the rule is inviolate. Every single one has to touch the top line, has to touch the bottom line. Can't go higher, can't go lower, can't float in the middle. In this way the learning curve takes off. So after we teach size one uppercase letters, we move onto size one lowercase letters. There are only seven of these. I don't teach B and D at the same time. I teach B as part of the BLT, and as before, first make a perfect letter. Point out all the touches and then make a series of really bad ones. I would imagine that you could look at all of your children's letters one by one and figure out what they were. It's in the context of the whole that it's a mess, so that's why you know it's not about form. Finally you make one in all the right places, but not only, and this is where the kids should be shouting back at you, "It's also a Super C," meaning that it starts with a C formation.

This is the rule for size two letters. They have to touch the dotted line, they have to touch the bottom line, they can't go higher, they can't go lower, they can't float in the middle. Okay, so it's a variation on a theme. There are 14 size two letters. Now, know that I don't count the dot in lowercase l as part of the body of lowercase l. It is the standing tall part that has to touch the dotted line and the bottom line, and as before, first make a perfect one. Point out the touches and then make a series of really bad ones. Again, they all look like As. Ask the kids to critique you, they love this part. You've essentially given your children the answers to the test. So now they're the teachers. You're gonna point out all the touches, way to earn a star, but not only, and I hope you're all yelling from wherever you're sitting, it's also a Super C. So here's the rule for size three letters. They have to touch the dotted line. They have to go below the bottom line. They can't go higher. They must go lower, and if it has a belly, it has to touch the bottom line. Okay, so admittedly, I'm not winning any Grammys. It's a soundbite. There's only five of these letters and the only one that does not have a belly

is J. So again, make a perfect one, point out all the places where it is not touching. Finally, way to earn a star, but not only, it's also a Super C.

The next concept, stars and dice, is actually both a concept and a strategy. Letter lines have to be touching the writing lines in all the right places. We're only scoring for size. So there are lots of assessments out there that have you sitting there with a millimeter ruler. Oh, who has time for that? I am suggesting to you, and this is a study that I'm looking forward to doing in the future, you get enough information about measuring consistency of size to be able to begin to evaluate a student, to begin a treatment plan, and to use it as an outcome measure so you can note progress. So if you have a student who made three letters and they're all the correct size, they would earn three stars. That's a perfect score, three out of three. However, if the letters are not the correct size or maybe they made 'em the correct size but not the wrong way, suppose they started at the bottom, suppose they, instead of making two slant lines for an A, one was a standing tall line, then it would be time to play the dice game. And here's where we are very happy to say that we have elevated handwriting practice into the world of craps. It's a crapshoot, you never know what you're going to roll but you've now given the power to the kids and the research shows when kids have a say in their practice, there's a buy-in. So dice can determine initial or remedial practice. If a child rolls a five, they have to make you five star-worthy letters. If they make you five letters but only two of them are star-worthy, they're still printing you that letter until they earn five stars, and if they roll a one, imagine that. They only have to make one, but it better be a good one or they're going to have to make you another one.

And here's how you score for letter size. Now, suppose your child wrote the word Monday. I'm gonna give a star to O and D. Overall those letters are the correct size. Here's the score, two out of six, 33% if you need it in a percentage. Then I'm gonna underline M, N, A, and we're now gonna play the dice game on each of these letters. I'm also going to underline D. Even though overall it is the right size, you'll notice a gap

in D. When you play the dice game, now you wanna make your letters the right size and the right way to earn a star, you have to close the gap. You have to start at the top. You have to use the correct letter lines and that said, my friends, if your children are making their letters the right size but the only way they cannot not reverse uppercase N is by starting at the bottom, I'm gonna strongly encourage you to teach starting at the bottom. If they are making their uppercase A with one standing tall line and a slant line but it's the right size, I'm gonna suggest to you that you move on. That child has now created their own font and that is not the variable that's going to determine readability.

Okay, so I've told you it's all about size followed by space. Space is the second most important variable but I strongly encourage you to not get hung up on space until you have 80% accuracy in size, and you will. And at this point we talk about inside space, in between words there should be room for one spaghetti. In between letters there should be room for one spaghetti. In between words there should be room for one meatball. So at this point in time I walk around with a yellow colored pencil. If it's a young student, I'm gonna sharpen that pencil. If it's an older student, I'm gonna leave it as a dull point. So now I start making my spaghetti lines in between my letters. If there's still room, I'm still making spaghetti. I count up all my potential spaghetti spaces. Star those places where there was room for only one and there's my data, six out of nine. I now draw meatball spaces in between my words. Star those places where there was room for an equal sized meatball. If they did not crowd the right margin, you can give them a free meatball. If they properly aligned down the left margin, you could've given them a free meatball there too and there's your data.

Now I wanna talk a little bit about the research. So there are a number of published studies. This was the first one. This was the largest study ever done on handwriting. We had over 200 students, two schools, an urban one in Massachusetts, a rural one in upstate New York, three grades, kindergarten, first and second grade, control an

intervention in all of those grades. The change scores were significant for three different standardized or norm reference tests at a 0.001 level, that's huge. What that means for anyone whose stat course is not at their fingertips, it means that there's a 99.9% chance that the intervention was the cause of change. This study went into the OT Journal of Research, 2015. The second study was smaller. This went into AJOT in 2016. It proved that Size Matters was effective as an intervention for at-risk kindergartners and it correlated writing with reading. There were significant improvements in letter sound recognition, letter name recognition. This study came out in October, I'm sorry, of May of 2018, University of Wisconsin, Madison. It was a comparison of effect sizes among nine handwriting programs, two of which were HWT programs and their conclusion was that when it comes to legibility, Size Matters is best. All right, so we're going to reference the research when we talk about how to use Size Matters in a multi-tiered system of support. So regardless of whether your school calls it intervention, INRS, intervention and remediation services or RTI, response to intervention, or MTSS, multi-tiered student support, it's all the same thing. You have your tiers of intervention, your bottom-most tier which addresses the bulk of your student body. That's flexible year long, school-wide, within the classroom, those types of interventions. Tier two, your middle tier, rapid responses, targeted interventions. You're working in small groups now. Your top tier is where you can provide individual interventions. You're doing something diagnostic. You are progress-monitoring weekly.

So how could we use Size Matters at a tier one, tier two, and tier three level of intervention? What concepts, strategies, and materials could be used? Because it is a marvelous program for using in a tiered intervention because it does so lend itself to this program. So first of all you're gonna teach everybody the song and dance, the rule for size one letters, they're listed here, they're gonna roll off your tongue because you're gonna say them so many times. So let's look at tier one, your bottom-most tier. What concepts and strategies could you share with your teachers at a tier one, what are the concepts? Share the concepts, the letter lines, the starting points that every

letter starts on a line, the rules, stars and dice, spaghetti and meatballs, run handwriting clubs. So I often would run handwriting clubs for my at-risk students. You can run a handwriting club during the school day, after school, you could have handwriting clubs in your private practices. Teachers value handwriting, parents value handwriting, and they will come to you to help their children become functional, legible printers. Handwriting clubs are a great time to build your peer mentors. The research shows kids teaching kids, best practice. Hang posters in the hallway. When the kids are going from their classroom to the cafeteria, to the gym, they can see the supportive posters and be reminded of the different concepts.

Here's some of the materials that you can use at a tier one intervention. So there is a Master Guide of Adapted Writing Paper that has over 100 different types of writing paper. There are also paper packs that, at first grade, second grade, third grade, I've always been fascinated to go into a kindergarten classroom. They might be using primary paper. First grade is on regular rule. Please know there's lots of paper on the market but just because it came to the market, don't just think that it is proven to work. There's lots of paper that is strange that is not going to work for your student but there are different grade levels of paper for your students to help them out. My adapted paper has a thicker bottom line. Stopping is harder than starting. I give kids an extra chance to get it right. I show the kids the different types of paper. Which paper do you think you would be most successful using? And it's amazing how many times the kids select the paper I would have selected for them. It's like they intuitively know. If a child is still struggling, give them letterbox paper. Now, my letterboxes are white. I learned from my vision therapy colleagues years ago about the importance of reversing polarity. I want the kids to see their writing, so the white letterboxes will be framed inside of a darker background to really zero your kids' attention into where you want them writing. This is great for your low vision kids. It's great if you have any kids with attention issues on your case, so you got any of those and you'll know how thick the bottom line is. You can give them individual letterbox paper. Again, white letterboxes

framed inside of a textured background with thick bottom lines. I like a dotted middle line, I'm a fan of structure, and I'm a big fan of blotters. So blotters are pieces of construction paper that you place underneath writing paper. Years ago when desks were made of wood, it was a softer writing surface. These laminated desktops that schools have nowadays are like fast tracks. Kids may be aiming to stop on the line but their pencil skips out from under them, so if you put a sheet of construction paper, could be a single sheet, maybe two, underneath your paper, construction paper is made, first of all, by pressing lots of little pieces of paper together. It traps some air, it will absorb some of that extraneous movement, slow down the pencil, give the kids an extra chance to stop on the line accurately. If you have whiteboards, consider using your pink, yellow, blue markers to make squares and rectangles on the board, black to make your lines.

These are called staff writers. Your music teachers probably still have them in their closets. You can make lines on the board, and honest to goodness, this is how I started. I didn't have some of the materials I'm gonna show you in a minute. I had a whiteboard and I made lines on the board and I drew my size one, size two, and size three letters on the board to graph out language the teachers were teaching and you can do that too. So this is the Master Guide of Adapted Writing Paper. It is a spiral-bound book. As I said, it's got over 100 different types of writing paper divided into preschool, kindergarten, first, second, third, and specialty paper. We make the book extra long so the spiral doesn't show in the copier 'cause that would bother me and you have permission to copy this entire book. I want you to have great materials at your disposal. We call this the Magnetic Rectasquare Board. I'm not gonna say that twice 'cause it's such a mouthful. Typically we just call it the MRB. Now, in all truth, it is not magnetic. It has a ferrous backing to it so that magnets stick to it. It can work on a wall. You can staple it or thumbtack it to a bulletin board and magnets will stick to it. It works best if you back it up to a magnetic smart board but it comes with a series of pink, yellow and blue magnets. Both of them are wipe-off surfaces and you'd use this

all day long to graph language that's meaningful to the curriculum. Spelling, vocabulary words, science and social studies terms.

This is from the poster series. This reminds the kids which letters are size one, size two, size three. The AlphaTrangle, and no, that's not a misspelling. We actually took out an l and made up our own word 'cause we could 'cause I made it and I thought it was a long-ish word. This puts information within your students' line of vision so they may actually use it, because those desktop strips, terrific information on it, it's at the horizon and yet they need a near point reference. So we designed this so it can't be scratched off, can't be written on, it rotates so the kids can see the different size of it, it's an exact 12 inches, you can use it as a ruler or a straight edge if you desire, and it supports Size Matters in that all the uppercase letters are outlined in pink. The size one lowercase letters are in pink boxes. Size two are in yellow, size three are blue. You can use the AlphaTrangles during any writing task and here's the Dice Game. So our Dice Game has 24 die in it. There are four-side dice, six, eight, 10, 12, 20-faceted dice. There's sparkly and marbled and iridescent. Some have the dots, some have numbers, some have words, some have sign language, and I'm going to share with you that if you have dice in your classrooms that are just as cute as mine, it's all about empowering kids with a say in their practice. If math is happening in your classroom, you probably already have dice.

The Point of View Survey is a screener. It's a true screener in that you can administer it without touching anybody. Once you start touching kids, you are actually doing an assessment. There are implications for treatment. One of my problems with the existing tools that are out there is that you go through these very cumbersome evaluative processes and then what do you do with that information? So the Point of View Survey has implications for what to do with that information, whether you're going to monitor that student or pick them up for an evaluation. We are looking to do a study because I do believe it will prove to be a valid outcome measure in time. And again,

you can share the research with your administrators, with your teachers. So tier two, your middle tier, what are some of the concepts and strategies to use here? Again, the rules, you will be singing and dancing in your own form the rules all day long. Remind the kids to teach you back the rules. Count the touches, issue stars, play the dice game, spaghetti and meatballs, so silly and yet so powerful. The kids love this concept and I have to share with you, the kids cannot score themselves for spaghetti and meatballs unless they swap out their pencils for yellow and red ones. They love this concept and they do wanna score themselves but if they start drawing spaghetti lines in between the letters, it's unreadable all over again. So yes, they can score, but make sure you've given them yellow and red colored pencils.

Graduate kids to higher grade level paper. This is very powerful, so imagine having gone into a classroom. Suppose it's a first grade classroom and you stop a student whose printing is beautiful. You can say to them, "I believe you're ready for second grade paper." How do you think that student's going to feel? She's in first grade and you're graduating them to a higher grade level paper. All little kids wanna feel like big kids and they do that by making their letters the right size. Now, of course, other kids in the classroom may ask you, "What about me?" And you'll say, "Oh my gosh, you're so close. "I want you to be thinking about those size two letters." "What's the rule, then?" Once again, you're singing and dancing. I'm gonna come back in a couple weeks. I believe second-grade paper is in your future. Can you imagine how powerful that is? Encourage self-critiquing. The kids can score themselves. They can score their classmates. Again, the research shows when kids have an ability to teach each other, to self-monitor and to pass that on, there's a buy-in and kids can trade their workbooks, their worksheets, and score their classmates. Now again they're feeling like teachers so they can track their scores. You can push into classrooms, that is best practice anyway, to push into classrooms, share the concepts, the strategies, the language that you use with teachers.

Home programs are also another thing that you can do at a tier two intervention. Size Matters is such an easy program to learn, to implement. You can share this with parents. Parents can easily follow through and when they're working with their kids on homework, they can say to them, "So remind me, "what size is this letter and what's the rule?" And of course everybody now knows the answer. More concepts and strategies to use at a tier two, be a center, be a center in your classroom. So again, you can model for the teachers and the aides the language that you use. Use letter blocks to build words. So in my full-day classes, we actually are centers but you would go to any of your craft stores and buy pink, yellow and blue foam sheets. You're going to cut them into rectangles and squares that fit your sentence strips and now the kids can have their own little miniature MRB, now, clearly it's not magnetic at all, that they can use at their desk. Get graph paper to draw pink, yellow and blue letter boxes and I always encourage when you do that to get graph paper with slightly large squares so there's something to color in, maybe 1/4-inch squares. Play games when you push in like Simon Says. Simon says be a standing tall line, be a lying down line, whoops, Simon didn't say.

Project adapted paper onto the smart boards. So a lot of your classrooms have smart boards. The one caveat here is that you do have to take a moment to calibrate to make sure that when the teacher is modeling that exact touching of their letter line to the writing line, that they really are. And then draw writing lines on the board. And again, do ask the teachers to be especially conscious to make their letters touching the writing line so the kids have something to model. Still more concepts. Again, go back, teach all the concepts, and that really depends on the grade how long that's gonna take. So your older grades, you can cover the concepts in a day. In your younger grades it may take a week to go through all of the concepts. You're always going to be reviewing the rules. Here you are being a center in a classroom, sharing the MRB in front of the classroom during any subject. Writing, putting writing lines on the board, stars above the alphabet strip. If they have one, maybe put a star above those letters

that you have instructed the kids on. They are now, here on after, they are responsible for making those letters the right size, and issue blotters. So when I mentioned using construction paper, the kids love the blotters but you can ask them, now, would you like a blotter and how's that working for you at the end of the day? If they think they're going to reuse them by pushing them into their desks, it's a one-time deal. You do have to gather them back up, put 'em back on the shelf or the windowsill, or if you can go to Lowe's, Home Depot, a wallpaper store, and get vinyl wallpaper, the glue side of wallpaper has a lovely texture to it, a lovely grab, and that's more durable. You can make go lines and finish lines on your blotters and now you can roll them up, put 'em into the desk, roll 'em up, put them into their book bags.

And even more concepts and strategies, issue the AlphaTrangle. This is what the AlphaTrangle looks like. It is that triangular reference. Adapted writing paper, different grade level. For those teachers who say to you, "Listen, I believe in handwriting instruction. I don't know how to fit it into the day," I say to them, "Can you walk around with dice?" Because what happens, once the kids understand the concept and the strategy, when they hear the clinking of die, it's like Pavlov's dog. Your ears perk up, their eyes open wide, they look at each other, is she walking around with dice? 'Cause they know, at any moment, you could stop by their desk and ask them, "So, tell me about that letter, how'd you do?" And the kids will look at you and they'll probably say, "Uh, not so good," you say, "Well, why?" "What size is that letter and what's the rule?" So right then and there the children are singing and dancing with you. Say to them, "I want you to pick out a die "that's calling your name." You could have multiple die with you. You could have the Dice Game with you if you'd like. The kids roll the die and then at the bottom of the page, the back of the page, another piece of paper entirely, they are making that many of the letter star-worthy. Now, if you stop one child in that classroom, trust me, everybody else saw that interaction and they're thinking letter size too. So you're going to count all the letters printed. That number goes in your

denominator. Count all the letters earning stars. That number goes in your numerator, fast data. Run handwriting clubs, issue certificates of achievement.

Now, there is something on my website and I will share that with you at the end of the presentation, realotsolutions.com, that has free downloads. I try very hard to be a resource to therapists and in the free downloads there are folders of things, how to make and other resources for you. This certificate of achievement is there too. You're welcome to print out my certificate of achievement and use it, you're welcome to create your own, but you would issue this to the kids once they make their letters the right size, When they have maintained their spaghetti and meatball spaces, when they have shown accuracy in copying, and if you have a principal who's supportive of you, ask if they'd be willing to designate a wall outside of his or her office as the wall of fame. Once kids master letter size, they write their name on a sentence strip. Hang it up outside the principal's office. It's a status symbol. Again, build your peer mentors. Play the spaghetti and meatballs games. Issue stars all day long. Group games, Simon says be a standing tall line and here's some tier two materials. So there's the Master Guide with our individual journal books. I intentionally did not make them cutesy. I don't think a fifth grader wants to have a dinosaur on the outside of their journal books. The writing lines outside the book illustrate what lines are inside. It comes in kindergarten, first, second, third. It doesn't say the number in the front of the book. A fifth grader who needs a second grade ruling isn't gonna wanna see that it's second grade paper. There's a tiny number on the back of it that indicates what size ruling and you can just say it's the second in the series. The dice game, the student workbook, so there is one grade level of student workbook. It's kindergarten level but I don't write that on the book 'cause you have students who are older and working at this level. You have your special needs students working at this level. The first year that districts adopt the program, we encourage the student workbook for kindergarten and first grade for that consistency of language. The second year, first grade doesn't need a student workbook. I would continue to encourage it for kindergarten, so they have all

the 10 learning activities to play, but after the first year, the first graders know the language. The teachers know the concepts and strategies that they can implement all day long and you're going to use the adapted writing paper, the AlphaTriangles, and I'm gonna suggest, laminate your posters. That's how you teach the concepts year two onward. Makes it very affordable.

The Point of View Survey can be used at a tier two level of intervention also, and again, share the research. Now, that said, there's another study. So this study came out in October of 2009. It went into the Journal of Occupational Therapy, Schools, & Early Intervention. This one talked about the self-monitoring component and we're very proud that this is very much a part of the Size Matters handwriting program. The kids are empowered to score themselves. So we had a therapist test the premise. Do the kids feel empowered by that? Because that's what's been suggested due to research. There's gonna be a buy-in, and in fact, that's actually what happened. The kids did report that they really like being able to do that and their test scores were significantly improved. Their handwriting skills were significantly improved. So we are delighted to have that research for you also. But there's more.

This study made it to a poster session. It asked the question, do school-based OTs report change in their ability to implement collaborative handwriting instruction after participating in a Size Matters educational course? So know that push-in collaboration is best practice but there's been a lot of therapists who have commented on feeling uncomfortable. They've shown up at classrooms and teachers have asked who are you taking? Has that happened to anybody? The answer is you really don't wanna take anybody. You wanna push into the classroom, be a part of it, see how you can be helpful there, but a lot of therapists do feel uncomfortable, not sure how they're going to be helpful. So this particular therapist did a study to see if sharing with therapists all the ways that Size Matters can be embedded across the curriculum, the stars and dice, the rules, the MRB, the AlphaTriangles, the adapted writing paper, when you

share these strategies, the materials, with the teachers, do the therapists feel more comfortable pushing into the classroom? And the answer is yes, they really did, and that was great to know, so know that you too will feel more comfortable pushing in. You're going to have something of meaning to share with your teachers. Tier three is your top tier. Here are some of the concepts and strategies you can use at a top tier. So this is more individual. Pullout happens, not best practice, but sometimes it's necessary. Pushing in, supporting a child one to one, desk side, collaborating with the teacher, training the aides, training the parents, customizing worksheets with all of those options in the Master Guide of Adapted Writing Paper. Perhaps, and this is a great way to win over a reluctant teacher, and I've had therapists say to me, "So how do you do that?" I say, "I bring them gifts." Okay, so it's nothing fancy, but maybe I ask them, "Can I try redoing your social studies test?" "I'm taking a look at it, it's very busy." "I'm gonna rewrite it on adapted writing paper so it's more linear." That's the kinda gift that you can give them. When you do something like that for teachers, they think, wow, that was actually pretty cool. They realize that you come in peace, you're there to help out. Optimize the workspace, self-monitor, teach the kids how to self-monitor for size and space, give the kids a little desktop tracking chart, award those star-worthy letters, score for size and then space, and always teach the rules.

So if you are doing a tier three, your top tier, you're gonna need to get a baseline. Ask questions and allow time for changes to happen. Do you know where to start? You know what size to make your letters? Would you like an AlphaTrangle? So know that the movement in AOTA has been away from a deficit-based evaluation. Pretty much all of the assessments out there measure all the things the kids can't do. To be honest, I don't care. I don't wanna know what the kids can't do. I wanna know what they can do and if that's still problematic, I'm gonna start there. The test of handwriting skills, which is the only standardized handwriting assessment out there and was used for multiple research studies is a very cumbersome test to score. And then you have no implications for treatment, I mentioned earlier how important that is, but worse is that

the booklet that the kids are given to work in is blank. There's a little picture in the corner to let you know what task is supposed to happen on that page, writing the alphabet from memory, writing it from dictation. If I have a student who does not know the alphabet, I don't know what I'm seeing. It might not be a handwriting issue, so I give the kids an AlphaTrangle if they don't know the alphabet. I make a note, they need a near point reference, but I always wanna give the kids the chance to do their best, and again, if that is a problem, that's where I'm gonna be starting. And then I ask the kids to write their name, upper and lowercase alphabet, numbers zero to nine. I might also ask them to print a grade-level sentence and here's how quick it is to collect data. So the letters in their name, if there were 14 letters in their name, that number would go in the denominator. How many of those were the correct size? That goes in the numerator. They print the upper and lowercase alphabet. There should be 26 for uppercase in the denominator, how many of those were the right size? There should be a seven in the denominator for size one lowercase letters. How many of those were touching the writing lines in all the right places? There should be a 14 in the denominator for your size two letters. There should be a five in the denominator for your size three and know that numbers are a size one. So there should be, in zero to nine, there should be a 10 in the denominator. How many of those were the right size?

The intake, the printing and writing competency intake is a very comprehensive assessment. It is a booklet, you don't have to administer all parts of the booklet, but we do believe it will be proven to be a valid outcome measure in time, but no, it has not gone through the rigors of reliability and validity testing at this point. Just the same, what's really helpful about this are the implications for treatment. We wanna know what the kids can do so we can build from there. Here are some of the materials you can use at a tier three. The progress monitoring forms allow you to collect quick data. The desktop stickers are miniatures of two of the posters. The poster series has six posters. These are two of them. So if a child needs a near point reference, you can take the little sticker that shows which letters are size one, two, or three or the little

sticker that shows which letters are Super C letters and place that on their desk or on their blotter. There's the student workbook. You can certainly use that individually. There are 10 learning activities on each page of the student workbook so you can work with a student one-on-one with that and there's the activity books. Now, there are 18 books in the activity book series. At the bottom of each of the pages in the student workbook it'll tell you if you need more practice, activity book one, two, 10, provides you more practice. Now, the activity book series have individual letter boxes to help you frame those letters, and I mentioned earlier, I reversed polarity so they're white letter boxes and there's lots of fun perceptual motor activities in here. Now, know that the research shows, and this is what I learned in my doctoral research when I wanted to find out what is everybody doing about handwriting and who's really having success? The research shows that if you wanna get better at a discrete motor skill like handwriting, you actually have to put pencil to paper. You can work on all that core strength. You can work on those in-hand manipulation skills. You can work on your parquetry but that's not going to translate to legibility as much as putting pencil to paper.

So what the research supports is motor learning theory that talks about constant and block practice, that's your drill work, followed by random invariable practice. That's where you embed handwriting across the curriculum, and the activity book series follow that. So it's practice but they're made into games. You're making the letters into different letter boxes around the page so it feels more random and variable, and again, that's part of how we're going to build the carryover throughout the day. Again, share the research with your teachers, with your administrators, and I'm always looking to expand the body of knowledge. We have a study that's going on right now in Kentucky. It's in the data analysis stages. I am talking to therapists in Canada, in Nebraska, in Pennsylvania, to do research. I have a therapist in Pakistan who wants to bring Size Matters to students who write Urdu. Know that I am determined to be the most heavily researched program out there. That's how confident we are in how well it

works. So if research interests you, if you're in a doctoral program, contemplating going into a doctoral program, or would simply like to be a site, know that I am in contact with universities across the country and I would be honored and delighted to include you among the next research study. So again, if you have that principal who is willing to support you and they can designate a wall outside of their office as the wall of fame, kids get to write their names on a sentence strip once they've mastered letter size, hang it up on the wall. It really is exciting to see your name up in lights, as it were.

So who here is star-worthy? Who feels like they have a grasp? Size Matters is an embarrassingly simple program but it's extremely effective. We have spent way too many years focusing on form. There are 62 letters, numbers, when you add them all up, and as I said, individually they could be recognizable. When you make changes in letter size, that's what's going to change the appearance of the written page and it can happen immediately. So play the dice game, issue stars, teach the rules. If you wanna learn more about Size Matters, there is a three-part self-study webinar series that you can earn .7 CEUs. That's available through the realOTsolutions.com website. And I'm happy to bring a course to you. I am an approved provider of continuing education through AOTA so I can bring a workshop to your neck of the woods where you could actually do all the centers that we talked about, all the different types of activities, and even become a certified SMHP therapist. In conclusion, printing can be as easy as one two three, perfect scores are possible and your students can become Size Matters program champs because when it comes to neat printing, Size Matters. Thank you all so very much for participating and for being so patient during this webinar series. Here are some of the research studies that we have referenced. It has been a delight to be with you, technical difficulties aside. If you are interested in going to our website, use the discount code to earn yourself a 10% discount and I am available for questions now.

- [Fawn] Hi Bev and everyone. Thank you very much for participating today. Let's take a few questions here and then we'll wrap. Let's see here. Let's see. Can you just go over one more time quickly about the dice game?

- [Beverly] Sure, okay, this is ridiculously silly. The kids roll die. Whatever they roll, whatever number comes up on top is how many times they have to make a star-worthy letter. So again, if you have a six-sided die, it could be anywhere from one to six. If they roll a six, they have to make six star-worthy letters and you earn stars when your letter lines are touching the writing lines in all the right places but you can use the dice to determine initial practice, they're just gonna roll the die, or remedial. Suppose they made a letter and they made it the wrong size. Now when they roll the die, not only do they have to make it the right size but we do teach starting points, we do teach letter lines, so in the dice game for remedial practice, we want them to start at the top. We want them to use the correct letter lines. But I said also don't get hung up on that. Know that cursive starts at the bottom. In Europe or some Semitic languages, their lettering starts at the bottom. We have this hang-up about starting points. That is not the most important variable. It is the consistency of size that will make the difference in the readability.

- [Fawn] Okay, the next question we have coming in, does the research have specifics with amount of time with the daily and weekly use of the program? How much daily and weekly handwriting practice is needed to achieve the progress results?

- [Beverly] Okay, so great question, and no, once I've gotten involved with research, I am awed that any of it ever gets into the literature. You're imposing on somebody when you go into a school. So in the research study, there was 50 minutes of practice daily for eight weeks. So we limited the scope, kindergarten only did uppercase, first grade only did lowercase, second grade did upper and lowercase because we were

imposing for eight weeks on their curriculum. That was because it was a research study. In your settings, you're gonna make progress as quickly as the child is able to. I will share with you, you will see changes sometimes from the beginning of the session to the end of the same session. In fact, that's how I really knew I was onto something. I pushed into a regular ed classroom in first grade for 20 minutes, maybe a half an hour, and I shared what I was discovering with letter size. The teacher flagged me down later in the day to say that the kids' handwriting changed immediately and I was only in there once. So it really depends, we have had people share with us beginning to the end of the same session, week one, week three, a couple months of change. The changes are significant, they're visible, they're measurable.

- [Fawn] Another question is regarding pencil grasp. Does the program address pencil grasp and/or paper slant when writing and sizing letters?

- [Beverly] We do, and pencil grip does not matter. So know that the time to teach pencil grip is preschool. Once kids habituate a grip, you're not changing it and the research shows it doesn't matter. It has implications for comfort or endurance but not legibility. Don't get hung up on pencil grip. Again, once kids have habituated, you're not changing it anyway. It might look really funky but it's functional for them. In terms of paper slant, so you wanna slant your paper counterclockwise if you are a right-handed person, clockwise if you're a left-handed person, but always ask the kids, how's that working for you? That may or may not be comfortable for them. Kids kinda drive their own intervention. We always defer to the kids and ask them, how's that working for you? How do you like that paper, would you like a blotter? Let the kids make decisions. It is such a key part of Size Matters. The kids have a lot of say in Size Matters and it is part of a reason that the buy-in is so quick.

- [Fawn] We're gonna take one more question here. The school I work at uses the Handwriting Without Tears program in the classrooms and I don't think they will be changing that any time soon. Can the Size Matters program be used in conjunction with this program with students receiving OT?

- [Beverly] That is such a great question. I'm really glad that you brought that up. So first, hats off to Jan Olsen. We all used Handwriting Without Tears, I used them. This all started because I couldn't graduate anybody from my case study with Handwriting Without Tears and know that they're not evidence-based and I know people think that they are. They've been around for a long time, like 40 years, way before we were all about the evidence, so Jan Olsen's case study was on her own child. That doesn't make for strong research, but yes, you can supplement HWT with Size Matters 'cause Size Matters is a concept. I don't know anybody who's really enjoying their paper. Use the paper, share the rules, the dice game with them, issue stars. You can absolutely overlay the concepts and the strategies. We do say Size Matters is a full curriculum in itself but it's also an excellent supplement or complement to anything that you're already using, and in time, we've had schools say, "Listen, you can use Size Matters for your special ed. "We're staying with Handwriting Without Tears "for regular ed," and then the regular ed teachers see how great the special ed kids are doing and they ask to learn about it too. So if that interests you, what I would suggest you do is start taking photos, before and after pictures. Create a flip book. A picture is worth 10,000 words. Your administrators, your teachers are going to be wowed.

- [Fawn] Thanks, Bev, for a great talk today. I appreciate all the great questions that came in as well. Thanks, everyone, for joining us. We hope you join us again on Continued and occupationaltherapy.com, thank you.