



## Using the Taxonomy of Intervention Intensity to Select, Design, and Intensify Intervention

**Jason Harlacher:** Today we're going to talk about the taxonomy of intervention intensity and really, how can you use that to kind of select and sort of modify or intensify interventions for students. So as Colleen's letting everyone in, as you join if you can answer a couple of questions. One, put your name and title in the chat box, and then an answer to this question: when a student is not responding to an intervention, what are the most common changes made to the intervention or to interventions that you see? So what's kind of that first sort of go-to that you see. I'll give you all, welcome everyone, I'll give you about a minute there to put something in the chat.

So for those just kind of getting in and getting logged in, I just wanted to have you all introduce yourself in the chat with name and title, and then an answer to that question: what are kind of the common changes you see made to interventions when a student isn't responding?

Illinois, New Jersey, Ohio, good to see you, I'm actually from Dayton, Ohio. I think I have a trend of where people don't want to answer the question. So, that's fine. There we go. Increase time, that's a pretty common one, extend time, yeah. Yeah, we're going to talk today about what are all those factors that you can change when it comes to interventions, and I think extending the time is a really common one, and so I really want to talk about, what do you do when you can't extend the time? How do you work with the time that you have? So that's going to be the focus of today, really, around that intervention. Some good ideas I see going in there, group size, incentives, increase intensity...

So my name is Jason Harlacher, I'm a senior researcher with American Institutes for Research. In that role, I'm the director of our MTSS Center and the co-director for our Wyoming MTSS Center that we have with WDE (Wyoming Department of Education). Excuse me. My background is in school psychology, so I spent about eight years working in the schools, and then I've worked at the district level as a coach, the state level as a consultant, most recently with the Colorado Department of Education, but I've been with AIR for about two and a half years now. So I'll be sharing content today and presenting, and then Colleen Boggs is on the call as well, she is a research assistant with AIR, so she'll be handling some of the behind-the-scenes stuff. I have lots of resources to share today, so Colleen will be putting the links into the chat as well, and I have plenty of QR codes, so if you want to pull things up on your phone as well. But my goal today is to go through the dimensions of the taxonomy and give you a frame for how to use them both in terms of selecting interventions but also using them to intensify interventions as well.

Feel free to put any questions that you have as I go along in the chat. I'll try to respond throughout the intervention, or excuse me, throughout the presentation, but I'll have time at the end to address any questions that you have. All of this is kind of made possible with our National Center on Intensive Intervention, so the materials, the resources, a lot of it will come through NCII. At NCII, our mission is really to help students with intensive needs, whether that's academic, behavioral, or social and emotional. And so we train on and share and showcase what's called data-based individualization, which is a systemic, excuse me, a systematic process or

method for determining kind of when and how to provide more intensive intervention, how do we support students and what does that look like. And so we have five steps that are illustrated on the right between the kind of orangish and green boxes there. It's really an iterative, ongoing process and so in the upper part of it we start with that kind of validated intervention program, we progress monitor and gather fidelity data to see if it's working for the student. If not, we then gather additional information, that diagnostic data, to then adapt and modify the intervention. And then we gather progress monitoring and fidelity data to see how that's working. So you can see a really, really intimate connection between the instruction and the data that we gather, really seeing is what we're doing impacting that student there. If it feels familiar, it aligns really well with a multi-tiered system of support, so what we advocate for is, at tier two we pick a standardized intervention that has demonstrated effectiveness with students, and we provide that based on kind of the recommendations of the intervention.

Typically, about three to seven students within a group, and that duration, time frame is kind of determined by the nature of the intervention. And so we use a standardized intervention at tier two for two reasons: one, it creates an efficient process. We identify a need and then we pick an intervention that's almost a plug and play that we can use right away. And the second reason is, we do that because we know about 70 to 80 percent of students who get a standard intervention will respond to it and they won't need additional support, so it can help build a really efficient process within your school. If that tier two intervention isn't working for the student, we then build upon that platform by adjusting and modifying it to intensify and individualize it for the student. And that's really where we're going to live today is talking about, what factors do you change, how can you intensify an intervention beyond just adding more time? We know that time's limited in schools, and so what are the other things that we can tweak and adjust to support students?

And so how I kind of think about DBI is, we're starting with kind of that standardized intervention, and then if it's not successful for the student, how can we tweak and modify the intervention a little bit to support that student? And so I think about it as, almost a, you know, like a music board where you have all these different buttons or levers that you can push. So what are the one or two or maybe three levers that you can adjust to kind of intensify and better match that intervention for the student? So building off of that tier two platform, that evidence-based intervention, to kind of intensify and modify for the student. And so there can be a lot of things that you can think about when changing for a student. You know evidence-based, how evidence-based is the program or what is the effect size can be a kind of a good first step, does this intervention have evidence showing it works with students. Perhaps you can look at group size, can we modify that. How explicit is the instruction, is the student getting a lot of time to respond and practice the skill, and there's a whole collection of other things.

So you can kind of get lost or overwhelmed with the amount of things that you can change, and so it kind of begs the question: wouldn't it be great if there was a framework for kind of how to guide our thinking about what interventions to use or how to adapt them? And the answer is yes, actually there is a framework, and that's our taxonomy of intervention intensity. So I just want to give you all a couple of minutes here, you can follow the link that Colleen put in or use the QR code that's on the screen, but I'm just going to give you a couple minutes to look through and read through this handout. There is an academic page on the first page and then the second page is for behavior. I tend to think about these collectively, but we have them kind of separated out to share some of the nuance between academics and behavior. So I'll give you a couple minutes and then we'll continue.

So just take a one more minute there.

Okay so hopefully you had a chance to kind of get familiar with that. We're going to go through each of these dimensions and dig in a little bit. And I want you to think about some of the changes that you see within your

site, common changes around interventions, and kind of think about where do they fit within these dimensions. Really these are categories or dimensions, and then there's a lot of different sort of nuance within each one of them. So how do we use the taxonomy? We have two purposes for it, one it can help you select an intervention. You know if you've ever had to make a decision around paint color, if you painted a room or your house, there can be a lot of options. And so how do you choose the best color for your house? And so the taxonomy can help similarly with choosing an intervention, you know, how do I make a decision around which intervention might best suit the needs of my students? But once you have an intervention, you can then also use the taxonomy as well to intensify that intervention. So not just choosing what to use, but when it's in place, what are the different dimensions or levers that we can push to intensify a given intervention? So let's kind of go through each of them, we'll talk through some of the things for each one.

The first one is strength and it's really just asking that question, what is the evidence behind it? Has it been shown to be effective, not just with students but with students, with intensive needs or with disabilities? Is there demonstration or good research to support that? And obviously the stronger the evidence that it works, the greater the strength of the intervention, you can have more confidence that it that it might work with your students. And so in understanding strength, I want to clarify the difference between a statistically significant finding versus an effect size. If you're familiar with Hattie's work, effect size has become pretty common, it's a good way to understand the research. Statistically significant simply just means that within that study or that research, an effect was found, meaning that in a general sense it worked. And it's similar to just turning a light switch on and off. It's either on or it's off. So a statistically significant finding just tells us that an effect was found, the light is on, but it doesn't tell us kind of how bright that light is or the magnitude of the effect and that's where the effect size comes in. It allows us to then make judgments about, is it just a tiny little bit of an impact or was it a big impact? Kind of quantifies the range of impact or the magnitude, similar to a dimmer switch where, is it on just a little bit and there's a faint amount of light or is there a lot of light within the room.

And so, effect size is a good way, one good way, to kind of understand strength when it comes to intervention. But there's a couple of different other things that we can look at. I joke that a vendor will always tell you their product works, right, so you have to look at, not just what is the research, but who's telling you that it works? Is it a third party that is kind of neutral, or is it the person at the workshop or the fairs trying to sell you a product, right? Where does it come from, has it been vetted, does it have good methodology behind it, and so forth. Another good question is, you know, there might be good research out there showing that it works with students, but are they students that have similar characteristics or needs of your own? So digging into, not just it works with students, but does it work with the students that I work with? You can also look at the outcomes that the research is based on, so are they just saying it works in reading in a general sense and you don't really know what aspect of reading, or do they say it works with reading vocabulary or reading comprehension? So you can kind of dig into, you know, a program might say it works with reading, but maybe it's not the skill that you need help with, with your students.

And I mentioned effect size, and kind of a bit of caution with effect size, historically effect sizes can be quantified as, you know, 0.2 is a small effect, 0.5 is a moderate effect, and 0.8 is a large effect. But that's all kind of relative on what you're studying, the content area, and then kind of what the given state of the literature is. So you can see on here, for example, early elementary has, like, small to moderate effect sizes across numerous studies, and then as you look at upper grades, this effect sizes become smaller. So you can't, it's hard to apply just kind of a general small-moderate-large standard to them, you have to look at within the context, so you could be pretty excited about a 0.1 effect size for older students, but a 0.1 for younger students is less exciting there, given kind of the relative literature there. So where can you find information on effect sizes? I'll give you two resources here. One is our tools chart, so on that tools chart we evaluate studies around interventions and we share the effect sizes found within those studies. So you can filter and look at the tab there, the quality of design and results, and it gives you an indication of what is the effect size there. And we cover each of the given studies

for certain interventions. This is updated frequently, so there's kind of this rolling update that happens where we are looking at literature and then updating the site. The other area, the other resource is What Works Clearinghouse. They look at a collection of studies on a given topic or intervention and then they quantify and aggregate the effect size there. So you have two pretty good places to go there for effect sizes.

All right, so strength is one there. The other is dosage, a lot of people put, you know, extended time or more time, and that falls under this, this dosage here. We think of dosage in terms of, you know, how much, how many opportunities or how much time is there for the student to kind of practice or demonstrate a skill. And that also includes how much feedback there is or from a behavioral standpoint, do they have frequent opportunities kind of exchange reinforcers or tokens for backup reinforcers. So if you have a token economy there. You can see at the bottom of the screen, we tend to think of opportunities to respond within this kind of context where there's some sort of prompt, whether it's a verbal prompt, or written prompt, or they're reading something and it prompts them, but then there's an opportunity to respond to demonstrate that skill and then you can see there's a final piece where there's feedback provided, whether it's acknowledgment or praise of the accurate use of the skill, or if it's corrective feedback that can be provided, right. We don't want kids kind of practicing errors, we want to make sure we have that corrective feedback in place so that we can correct those and they demonstrate the accurate skill.

So we think of opportunities to respond when we're looking at how much time, how much practice, we can quantify it with those. So we'll share some resources around that here in a second. Let me share examples of how to increase dosage, some of these, you know, it's easy to add more time, but there are other things that we can do. First, we can increase the minutes per intervention session, so if it's 30 minutes, we could increase it to 45 minutes. We could then also increase the frequency of sessions. So for example if it's Monday Wednesday, maybe we had Tuesday Friday as well and now we have four days a week for the student. We can also increase the total sessions, or the length of the intervention, so let's say it's eight weeks and perhaps we increase it to 12 weeks there.

And then adding additional time, so if a student had an intervention perhaps in the morning that's 60 minutes, we could then maybe add 30 minutes later in the day for that student. We can also think about it in terms of behavior and feedback, so if a student is getting feedback from teachers at kind of three times per day at a given time, perhaps we increase it to 60 as well. Excuse me, not 60, increase it to six times there.

So a lot of those are based on increasing the time, but we can also work with the time that we have. So, for example if a student has five practice problems, perhaps we increase that to eight problems there. We could then reduce the group size. Perhaps it's five students and we reduce that down to two students, and so by nature, if there's fewer students in the group, that student has a higher chance of getting more of the opportunities to respond or time to review there, so you can increase the intensity that way. So just some questions to think about, I would look at the recommended dosage provided by the developer, by the interventionists. You know interventions are based on research, so there's certain days per week and amount of time that's given to students to get the effect that they found, so I would make sure that you're looking at that and adhering to that. It's kind of this match of how far behind is the student below, excuse me, how far behind or how below grade level the student is relative to what you're giving.

So, you know, are you providing enough intense instruction or amount of instruction to hopefully catch the student up there. And I think one thing to keep in mind is just the student's stamina and attention span. Sometimes you can get carried away adding intervention time, and we're doing five days a week now of intervention, and because of that we have to replace the student's specials, or art, gym, PE, and so forth. And we might end up taking away something they really enjoy, and so we want to be careful with how much time we're giving, and sort of what does their typical day look like, right.

So a good resource is the strategies for scheduling on NCI's website. This talks a lot about opportunities to respond and kind of maximizing the time that you have. A lot of times I don't think it's realistic or easy to add more time, especially in secondary schools, we got to change schedules, kids have block schedules, so how can you intensify what you have currently working. And so things like changing practice problems, increasing opportunities to respond, reducing group size, can be sort of strategies that don't involve adding more time or adjusting schedules with that. So strength, dosage, and then alignment here. Alignment really speaks to, you know, does the intervention match the needs of the student, right? Imagine trying to hammer in a screw. It might be a little difficult. So if you're trying to meet the needs of a student, we want to make sure that that tool that we're using really is addressing the problem. I've worked with schools and I commonly see they'll offer a tier two, a reading fluency intervention, right, Read Naturally seemed to be a big one I would see a lot back in the day. And the student would, you know, they're getting a couple days a week of read naturally or reading fluency intervention, but they're not progressing, and then when you actually assess the student's skills, you realize, oh they're still in an acquisition they need phonics instruction.

Fluency is just getting them to kind of practice the errors. They don't really, it's not matching what they need, they need to build the phonics first before they start developing that fluency. So looking at, you know, where is the student with their skill development. I think of alignment broadly as two different things. For behavior, I think about it as, how well does the intervention support or align with the school-wide expectations around behavior or social emotional learning? Check-in check-out's a good example where you can build upon the school-wide expectations and really dig in and get nuanced with what that student needs, right. If your school-wide expectations are be safe, be respectful, be responsible, then you could pick one or two of those expectations for the tier two intervention and really kind of dig into teaching and reinforcing one of those. For academics, we want to make sure that we're teaching the skill the student needs during intervention, and that we're not teaching a skill they've already mastered or kind of being redundant, right.

We want to maximize that time, so if that tier two or tier three we're going to target this skill, well then their tier one programming should address other things, right, we want to coordinate across that day, so perhaps at tier one they're getting access to grade level standards, we're focused on vocab and comprehension, and then tier two/tier three is built on maybe some of those remediation or more basic skills that they need help with. So it's coordinating across the day. Your intervention isn't going to fix every single thing, it takes the entire sort of programming across the day and that's what this dimension really speaks to. A couple good resources, one in the tools chart, you can filter out some of the things around alignment. So you can see, you can pick the subject, and then maybe a skill within that subject, so you can find an intervention that targets, you know, math facts or algebra and so forth. And then intensifying literacy instruction, this comes from the work in Michigan, but a really great comprehensive resource around, how do we kind of align and make sure we coordinate the support that we provide students, so that's a good document to download.

And then one more resource I really like is the instructional hierarchy. So with the MTSS Center, we created an infographic that just kind of quickly summarizes those stages. To me, instructional hierarchy is helpful to know where a student is with their skill development because that impacts the instruction that's provided. So like the example I shared around providing fluency for a kid who's still in the acquisition stage, right, there was a mismatch there. But if you think back to when you first learn to drive, right, you were in an acquisition stage where you're using a lot of your working memory and you just needed a lot of sort of modeling or feedback, and you needed all distractions, like, at a minimum because you're really trying to just learn that skill and get accurate with it. Once you are accurate with the skill, then you move into that fluency stage where then you can start to, you don't need as much working memory, you're just kind of in autopilot with the skill, you can begin to get more complex with the skill or your attention can kind of be diverted to some other things as well with that. And so you can read through that infographic, but you can think of students like, has the student acquired the



skill, are they in the fluency stage, have they moved into that generalization stage or not? And so that dictates the type of instruction you provide, because that instruction changes based on the skill that they're in. So a helpful one, helpful resource there around that.

That kind of ties into the next dimension, which is attention to transfer. Ultimately, we want students to be able to learn a skill and then apply it across time and across settings, and so what we know from literature is that a lot of students don't just generalize on their own. They kind of learn a skill in a setting, and we can't just expect them to apply it elsewhere, so we want to plan for that as part of our instruction. So if you think of the sequence of a student learning a skill, becoming proficient with it, and then sort of applying it across settings and different contexts, that's kind of the natural progression there. So we want to plan for that. We want, in looking at this table on the screen, we want to be on that right side of that, kind of instruction with transfer, where we're providing opportunities across settings and throughout the school for them to use that skill. We have lots of reinforcement for the different settings and providing that cumulative review for students. You know, as a school psych I would work with students in a social skills group and teach them a skill in my office in one setting, the instructional setting, but then we would go out into the building, into the school, and have them practice the skill in different settings and then I would work with the teacher to generalize it from my office to the classroom setting as well. So you have to be real intentional and thoughtful around that. We can't just sort of hope that they do it on their own there.

So, coming back to the tools chart, we offer some effect sizes around that. So when you look under that effect size tab, the broad effect size indicates that the study measured sort of broader or transfer skills, so the "T" stands for targeted on that screen there. So, for example, the Enhanced Core Reading Instruction, the targeted looked at a really specific skill, whereas the broader looked at a broader measure or a transfer measure of skills there kind of varied across studies there. So you can look at that information and kind of get a sense, did this intervention build in generalization or look at the generalization effect for that study. And then of course, I shared the instructional hierarchy graphic there, as well. So strength, dosage, attention to transfer, and alignment there are the first kind of four there. Comprehensiveness will sound really familiar if you're into the instruction and explicit instruction there, but this is just asking to what extent is that instruction explicit? How much modeling is there for the student? How much sort of guided assistance, leading with the skill and teaching the skill to the student? And then does it have that sort of test component of the, checking to see if the student can use the skill independently? So it's that "I do, we do, you do" model. Sometimes you'll see "I do, we do, you do together, you do alone" sort of focus. But it's looking at, just how intense, how explicit is the instruction the student is receiving?

As a general note, we know that as a student goes from tier one to tier two to tier three, that tier three instruction should be the most explicit instruction in the building, it should have the most opportunities to respond, the most corrective feedback, and the most time to practice skills. We know that's what makes intensive intervention work, is kind of those few things there. To get a little more specific, you know, in thinking of academics, a lot of bullets on here that you can read. But it gets into you can go in and observe that instruction and really see, is the teacher modeling the skill, is there a lot of time to practice, are they fading out support as the student masters the skill, is there kind of that distributed and sort of systematic review of the skill?

And then for behavior, are they teaching the appropriate or wanted or expected behavior in a really good, explicit manner? Are they adjusting the antecedents, looking at what happens afterwards, are we fading supports as a student masters the skill, and so forth. So some good resources around that, we have modules on NCII that go through what does explicit instruction look like? You can also Google Anita Archer, she's really the guru when it comes to explicit instruction. She really blends that academic and behavioral support really well. She's got high engagement, a good pace. Probably your most powerful behavior management tool is explicit



instruction, because when that instruction is engaging and students are successful with the content, they just, they're engaged and don't really have time to kind of get distracted or get off task there.

So I'll cover two more factors, and then we'll talk through, sort of how to apply the stuff and some resources I'm using it. But I want to set up this next dimension talking about that interplay between behavioral deficits or behavioral needs and academic needs. And there's kind of a chicken or the egg sort of situation here with where it starts. But if we think of a skill deficit, that would mean, you know, maybe being at, you know if there's some sort of math deficit and then you're asked to do math, it may not be very fun or engaging for the student. And so maybe they start to engage in some sort of avoidant behavior, whether that's passively sitting there, whether that's talking to peers, making jokes, you know, maybe arguing with the teacher, right, it can escalate from there. But some sort of behavior or engagement and behavior to where they're avoiding the task, or they get removed from the task, or maybe the work gets removed from them, right. And so then you can see, that can end up reinforcing that skill deficit, right, if they're missing instruction it's only going to decrease the chances that they'll master the skill.

So you can really get this sort of self-reinforcing or iterative process where the academic or skill deficit can kind of feed into each other and just kind of snowball over time. And I'm sure for all of you that work in secondary settings, right, it can be very large and powerful when it gets to those upper grades as well, because there's just years of avoidance and sort of missed instruction that just kind of accumulates. So some of the things I think about when you're adjusting or modifying here is, you know, does that behavioral intervention, can it be easily integrated within the context of academics? We can get kind of carried away with separating, this is my academic team we talk academics, this is my behavior team we talk behavior, and so communication across those teams are really important because chances are, students if there's some sort of behavioral need, there's probably, or a high likelihood there's academic need driving some of that as well. So can you select interventions that that combine some of those elements, and kind of make it a little easier to implement and provide to the student? And in terms of behavioral support, you can look at, does the intervention support some of those key academic or supportive skills in terms of self-regulation or executive functioning with that. Again, with this idea of, you know, let's kind of address the academic and skill, academic and behavioral needs together as much as we can.

So a good resource on NCII is a behavior support strategy, so these are a lot of ones that you can build into academic instruction and content. So if we're targeting academic skills and there's behavioral needs, you can embed or intensify with some of these here.

All right, and so the last one, really this dimension seven, the individualization, is just kind of asking, is there enough data or sufficient data so that you're actively seeing how the student is doing and that you can change and adjust based on that student response? A lot of interventions, that data can be built within the intervention itself, you know, for example check-in check-out you're gathering daily behavior data that you can use to adjust pretty quickly and easily. A lot of academic interventions will, they'll have their own sort of monitoring system within it. You're teaching the skill all week and then there's a probe or some sort of brief assessment on a Friday that gives you data. So is there data built in or is it something to where you're going to have to gather progress monitoring data or diagnostic data as part of it that you add on to keep sort of a close watch on the impact of that intervention? I'm going to pause there let me just see if there's any questions. Susanna, are the resources on the PROGRESS website? I don't, it's a good question. Some of them may be like linked over, but yeah it'll kind of vary. Oh, and Colleen's responding there. We tend to, since AIR kind of works with NCII and PROGRESS Center, there's a lot of cross sort of posting sometimes, and linking, so.

All right, and then a nice little plug there for the tools chart, yeah.

All right, so how do we take the taxonomy and use it? How do we apply it? So, let's talk about first, when you're modifying and adapting interventions, we want to operate from a hypothesis, right. We gather additional data, that diagnostic data, and information that should inform a hypothesis, which then informs the intervention adaptation or the changes that you make, right. We want to kind of be thoughtful and intentional with our changes. And you can see, these examples here, they need to be really focused on concrete, sort of tangible things that you can change. Gina needs more practice opportunities, Matthew needs more behavior supports, so forth. For me, I tend to say when you're gathering a diagnostic data, the problem or hypothesis should just kind of reveal itself as you gather that data. If the problem isn't clear, then you probably just need to gather some more information until it sort of reveals itself, right. So you can see here, if Gina needs more practice opportunities, if that's our hypothesis that she's not getting enough, then we add more practice opportunities and OTRs. If Matthew doesn't seem engaged, then we can modify those behavior supports to intensify the support so there is more engagement.

And so you can see those were all focused on really alterable factors or variables that we can change as educators. And we tend to categorize them under instruction, curriculum, and environment, so how can we modify those three things to better support the student. What we find when we look at teams that are problem solving is that they spend the least amount of time in problem analysis, which is really the most important part, because the better sense you have of what's going on, the more likely the adaptations you pick will address that issue, right. We're really good at identifying a problem, something's amiss, the student's not progressing, but then we jump too quickly to a solution. We just kind of start throwing out ideas and that's just kind of a scattered approach, it may work it may not. What we want to do is spend more time in problem analysis, so we have a better sense of what might work and a higher likelihood of picking an alterable variable. We don't want to get caught up in talking about things you can't change, those inalterable variables, When we, for me as an educator, when we focus too much on what you can't change, it's almost disempowering, right? You're frustrated, you want to help the student, but if you focus on things you can't change, it just kind of adds to that sort of frustration to me. So how do we stay focused on the alterable?

One, we operate from the image on the right with this idea that instruction, curriculum, and environment should all work together to support the student or the learner in the center. And the more those three sort of areas work to support the student, the better learning we actually might have for the student. And we go about assessing instruction, curriculum, and environment using what's called RIOT, which is simply the assessment methods. So we can review records or previous data, we can interview the student or and those around the student, families, teachers, etc., we can observe the instruction and the student in the classroom, and of course we can test or do assessments with the student themselves. But the idea is that, if there's a breakdown in learning, it's because there's some sort of mismatch between instruction and curriculum or environment for that student. So how can we tweak and adjust that.

So, a good question is, well what do we assess under each one of those? I'll share a graphic, a couple resources that are really helpful, but we can look at instruction and think about, for example, that comprehensiveness. How explicit is the instruction? What are the opportunities to respond? Is the student accurate with the opportunities? Is the instruction culturally relevant and sensitive? Is it matched to sort of unique student characteristics that we need to take into account? The academic and behavioral curriculum, and I include social emotional under kind of behavior there, but what's the scope and sequence of the curriculum look like? Does the, you know, the level of difficulty match where the student is at? You know, do they have that background knowledge or the prerequisite skills to learn the skill that's being taught, or do we need to adjust there? And then environment looks at, you know, are there clear expectations around what's expected? Is there kind of this highly reinforcing positive school climate, positive climate within that classroom for that student? And so, you can see all of these are getting at, what are those alterable variables, what's that good instruction and good curriculum look like? And so that we can modify or adjust that. So two really good resources, one is the





intervention intensification strategies. So you can see on the screenshot, it's categorized under those taxonomy dimensions, so as a team, you can look through this and it just kind of gives you ideas of little adjustments that you can make under each one of them.

And then this is our graphic from the MTSS Center, it's our newest graphic that we have, but you can see under "Instruction," "Curriculum," and "Environment," it gives you resources and assessment tools that you can use to kind of judge each of those sort of factors. And so we have, I was really excited to share, we have a classroom management really quick one-page assessment that you can use to look at the classroom management practices. And then we have an opportunities to respond assessment tool, looking at, sort of the number and frequency of OTRs that you can use as well. So a lot of other stuff linked there.

So I'll pause there and see around questions, but again, these are the seven dimensions for the taxonomy and just kind of the question that that kind of goes with each one.

Yeah, really glad the resources are helpful.

So we're good on time right now, I want to cover a few more things in terms of how to actually use the taxonomy and sort of judging in terms of selecting and intensifying interventions.

So I think, you know, a good way to use a taxonomy is really making decisions around interventions or curriculum and asking, is this the right program or intervention for my students? So does, is it the right fit um for your context, right? There are no perfect interventions, but you can use the taxonomy to kind of judge how well would this fit for my context and then, you know, what do we need to intensify or adjust to kind of meet the needs of our students for this intervention. So we have an assessment on NCII's website where, under each dimension, it just asks you to rate zero, one, two, or three. And so we offer kind of general guidelines for each rating. Just know there's no hard and fast rules, it's you rating based on sort of, kind of your familiarity and use of the intervention, but it's a way to kind of quantify the strength of each of these dimensions, which would then allow you to make decisions, whether it's intensifying or selecting a new kind of intervention or different intervention. So here's the rating rubric, and you can see on the screen there, it's a rubric where, under strength for example, it tells you well, zero kind of looks like this, a one, two, and a three looks like this. So again, the idea is you would kind of circle each rating, and then have kind of quantifiable numbers to kind of make decisions on. We have taxonomy briefs, which kind of do this already for certain interventions, and again these are ones that we're updating on a on a regular basis. But the briefs just kind of go through each intervention against the dimensions of the taxonomy and kind of offer our sort of judgment around them.

And then a helpful tool, it can be easy to lose track of the adjustments that you make for interventions, and so this is our resource around helping you kind of keep track of that. So you can see it has the dimensions, perhaps the rating for each of the dimensions if you did that, but then space to kind of document each of those changes. So for example, maybe your first adaptation is changing the group size, and so you indicate that and find that that wasn't quite enough for the student. So then you do another adaptation, description of that adaptation, too, there in that column, and perhaps you increase the opportunities to respond. So the idea, I think we can get a little carried away with changes, and so it's helpful to just focus on one or two or maybe three little changes you can make to an intervention. And this is a good tool just to kind of keep track of that, so you know what's been tried for the student.

Excuse me. Okay, pause there, any questions so far, just a few more minutes here. I'll cover a few more slides here but any questions or things to ask?

Okay, so question there then around helpful tools for tracking kind of the changes. Yeah it's always, you know it's one of the hardest ones, because we have so many different sort of software programs in schools and databases, it's easy to lose track. Obviously the tool I just shared is a hard copy, sort of paper copy that you could use, otherwise it's kind of developing a paperwork or system, you know, hopefully that your district uses or develops. If anyone has recommendations or thoughts on kind of an easy or simple way to keep track, that's helpful. I know that some of the schools I worked in, they would work with the learner management system. I'm blanking on some of the names that we had, but the student data system, and then they would be able to indicate like real simple information, like started intervention this date, modified this date, but it was pretty limited because it had to be customized, which is very expensive for districts and the developers, so.

Let's see, yeah, branching mind, I'm not familiar with that one, but one recommendation there, so.

Yeah, Google gets a lot of, if you can find a good developer to use Google Sheets, there's probably a really nice way they could use all that, with the advantage being, you know, Google Sheets is a free resource out there.

All right, yeah good thought, good question there. Last thing I'll cover then, is you know, if we're using the taxonomy, or wanting to use DBI, what are just a couple of tips to kind of help use it well.

For me, pick strategies that really address the hypothesis. We can talk about, you know, maybe you the hypothesis is the student needs more explicit instruction, but then we end up, we just kind of get caught up in sort of changing different things, or too many things, and we go beyond or outside that hypothesis. Trust the data, trust the hypothesis that you come up with, and just make a simple adjustment around that hypothesis. If we do too many things at once, then we don't really know what worked. You kind of have this medley of things you changed but you're not quite sure what was the deciding factor. So it's helpful to be intentional and targeted with your changes, with the idea that you're trying to pick ones that are really robust and evidence-based around those changes there.

To me, really good places to start, which are your most cost-effective are increasing the opportunities to respond, and in doing that, a lot of things happen from it. The student's going to get a chance to demonstrate the skill more, which tells the teacher whether or not they're learning it, which then can prompt the teacher to provide that corrective feedback. So there's a lot more of a feedback loop, and the teacher can have a better sense of how the student is developing that. And then, if there's any behavioral issues, those are going to decrease, because you're asking the student to be more engaged with the content, therefore less engaged with other things that you don't want. So increase opportunities to respond, and then the feedback. In particular that behavior-specific praise. Increasing OTRs and behavior-specific praise are really two robust sort of factors across any setting to really increase the potency of that intervention, so I would look at those two. And those are free to do. They're not complex things, they can be blended into any sort of intervention or setting fairly easily. Praise can be public, private, written, verbal, so it can be adaptable. And then your OTRs can be verbal, gestures, peer-to-peer, written, you can text and do all sorts of things as well with technology around that as well, So a lot of customizable or adaptable factors there.

And then, think about the entire day. The intervention person or teacher is just one person. And so the student has, you know, five and a half or so hours outside of intervention time to where you can tap into that time to intensify. It doesn't just have to be the intervention, and so looking at the entire scope of the student's day. And you can think about, like an exercise routine, right, you might exercise for 30 minutes or so each day, but what else are you doing the other 23 and a half hours that might impact, kind of kind of your exercise plan there?

So, I'll pause there, I'm going to look at the chat, but any questions that you have here? Got a couple a couple minutes left here, some good comments, different things.

Is there a way for the resources to be compiled and emailed? Oh that'd be a really good question for the, maybe Colleen or I'm thinking Amy Peterson, but I won't volunteer work for her. Yeah I mean, I think, the slides will be posted online and a lot of these resources are linked in the slides so you can access them that way. Yeah I was going to say, I think that, oh there you go listed together on the website, thank you. See, things I didn't know. But yeah, I think there's access to all the slides within a folder somewhere that would have them in there, yeah.

Oh perfect, thank you Catherine.

Well thanks everyone, I'll put, if you have questions please put them in the chat, a couple more minutes here. But I'm going to put my email if anything comes up after the fact, please reach out, I definitely am going to plug, I'm the director for our MTSS Center, so I'm going to plug our website where we have some free resources. We work a lot on kind of the systems and building capacity with MTSS, so some helpful things on there. And that is not, I have a typo I see, MTSS for Success, not successo.org, so.

All right, I think that'll about wrap us up, then. Feel free to follow us on Twitter and check us out there, and then our website there, [intensiveintervention.org](http://intensiveintervention.org). So I appreciate it, a lot of resources, I hope I didn't overwhelm you too much with them. But again, they should be easily found within the slides there.