

Don't Panic, Pivot! Tips for Implementing Data-Based Individualization (DBI) for the Synchronous and Asynchronous Learner

[Slide 1 – Don't Panic, Pivot! Tips for Implementing Data-Based Individualization (DBI) for the Synchronous and Asynchronous Learner]: Amy Peterson: Alright, hello everyone! This is Amy Peterson from the National Center on Intensive Intervention and I'm excited to be here today with a great panel of presenters from the Project STAIR Team and we'll talk a little bit more about who they are in just a minute. This Webinar is Don't Panic, Pivot! Tips for Implementing Data-Based Individualization or DBI for the Synchronous and Asynchronous Learner. So, before we jump in and get started, if you want to go to the next slide Erica.

[Slide 2 – Webinar Format & Questions]: You can see here on your GoToWebinar platform, you have a place to add questions throughout the webinar. You can add those questions. If you're having a hard time hearing or want access to materials or any kind of logistical questions, we will get you the answers as soon as we possibly can. And if you have any content related questions, definitely add those in there as well. There will be some times in the webinar also for engagement, so you can add your anything, any comments or any questions right in there throughout the whole webinar sequence.

And you'll also see a section where you can select the handouts. You can see the slides, as well as an infographic handout that goes with the session today. All of the materials for this webinar, as well as the recording will be posted for you to access after the webinar. So, if you want to share with a colleague or want to go back and look at it for a little bit more information, you can definitely do that as well. And so, as we get going, I'm going to turn it over to Dr. Erica Lembke and she's going to introduce you to the other panelists, as well as jump into the content. Thank you.

Dr. Erica Lembke: Thank you so much, Amy! And we're just thrilled to be able to partner with NCII on this series of webinars. This is the first in a series of three, and so we look forward to being able to talk to you more about DBI and mathematics in the coming a few sessions.

[Slide 3 – Session Outcomes]: Today, as we get going, we're looking for three particular outcomes. One, that you'll understand the critical features of DBI, that's Data-Based Individualization, across settings. That you'll learn components of DBI, the taxonomy of intensive intervention and strategies for what you all need right now, synchronous and asynchronous learning situations. And then finally, identifying resources to support DBI.

So, we've sort of divided up the session into evidence, into practical strategies, and then how you can move and take some of those strategies online. We hope it will be helpful in this time when I know that many of you are doing a lot of remote learning and remote teaching.

[Slide 4 – Webinar Presenters]: As Amy mentioned, there are four of us today from our project, Project STAIR. This is a cross-disciplinary project comprised of Researchers and Graduate Research Assistants, staff members at University of Missouri, Southern Methodist University, and University of Texas at Austin. As Amy mentioned, I'm Erica Lembke, one of the Principal Investigators at the University of Missouri. Also joining me today are Stacy Hirt and Stephanie Hopkins, Doctoral Students in the Special Education Program at the University of Missouri. And then also, Alain Mota, one of the key staff members on the project from Southern Methodist University. So, you'll be hearing from them in just a little bit.

[Slide 5 – We want to meet you!]: Before we get too far along, we'd love to go around; and I wish we had time for everybody to properly introduce themselves. But, if you are live today with us, we'd love to know more about you. So, if you wouldn't mind in the chat, if you would put in what state you're listening from and what your role is in your school, either as a staff person, as a teacher. We'd love to get to know a little bit more about who's joining us today. For those of you who listen in later to the recording, we hope also maybe that you'll have some folks in the room that you're listening to from your own location, listening with from your own location.

[Slide 6 – Project STAIR]: So, Project STAIR is a project funded by the Office of Special Education Programs. STAIR stands for Supporting Teaching of Algebra: Individual Readiness. And so, our focus for this particular project brings together Researchers from three institutions to help us support teachers and their students who might be struggling in preparing for taking algebra one. In preparing and reinforcing some of those foundational skills that will prepare; foundational mathematics skills, that will prepare students for algebra. We are about three quarters of the way through our project. We've had a little bit of change in perspective as we move forward with our research this year, but still looking forward to continuing to work with teachers and students as part of the project this year.

[Slide 7 – Overview of Project STAIR]: I'm going to talk a little bit about, briefly about the project.

[Slide 8 – Project STAIR]: As I mentioned previously, our target is really helping to enhance foundational mathematics knowledge for students at risk in middle schools. And we want to prepare them for algebra one.

[Slide 9 – Our Model]: To do this, we're actually working with teachers to help support them in some of these key areas. Data-Based Individualization certainly is, or DBI is, really the hallmark or sort of the two of the kind of key pinnacles of our model. Our overall goal is to help prepare students for success in algebraic readiness concepts. And to do that we're actually reinforcing and supporting skills in two areas: evidence-based instructional strategies and formative assessment.

These two areas comprise professional development that we're creating for our teachers, coaching, ongoing coaching that we're providing for teachers. And then also individual problem-solving intensification and assessments that students are engaging in as part of the project.

So overall, this model kind of summarizes our theoretical perspective and how we've been moving forward in this STAIR work. It's unique in that many projects that are focused on DBI math aren't necessarily at the middle school level or aren't focused in particular at algebraic readiness. We're lucky to be part of a network of projects that have been funded by the Office of Special Education. Programs that are all focused on this, on these particular areas: middle school and then mathematics.

[Slide 10 – Teams]: As I mentioned previously, there are three teams, three primary investigators who are participating. Leanne Ketterlin Geller from Southern Methodist University, Sarah Powell from University of Texas at Austin, and myself. And in the upcoming webinars, Leanne and Sarah will be leading conversations on things like assessment and measurement and intervention and intensification.

[Slide 11 Project STAIR comments ...]: Just to give you a sense of some of the support that we've had from teachers around our project, these are just a few comments that we pulled that kind of give you an impression of how teachers have felt about participation in our projects in the past. One seventh grade teacher said, "Project STAIR helped bridge the gap for my bubble kids." So, she means those kids, of course, that are sort of right on the cusp, you know. We want them to be there and do better, but they're just really close to being either students who are going to be really successful or students who might be at risk.

The Project STAIR process helped us recognize what the kids need and how to address the needs. A really powerful comment from an eighth-grade teacher participant. "Project STAIR added to my toolkit." We're always glad to hear that. We want to provide you with things that add to that.

[Slide 12 – Project STAIR comments ...]: "PD days," they're referring to our Professional Development that we provided. "Got me thinking about teaching different ways to approach teaching. Teaching with documentation." An eighth-grade teacher participant said, "I started paying more attention to precise vocabulary." Yay! So, it was appropriate. "Project STAIR made me more intentional in my instructional practice." So, we love to hear these key words like, intentional. A seventh-grade teacher participant, "Project STAIR utilizes data and research to back it up." And so, we're so happy that those ideas are being communicated because both of those are integral parts of what our project is about.

[Slide 13 – DBI Self-Reflection Check-In]: Okay so, you've heard a little bit about Data-Based Individualization. And you know a little bit perhaps about DBI from your past work in this area, maybe not in middle school math but maybe even in other areas. So, let's do just a quick check-in. How are you feeling right now? If you want to put either A, B, C or D in the chat. How are you feeling right now about DBI? If you're joining us live today, love to see those letters in the chat. If you're watching this recorded later, if you want to just jot down on a paper and share with others, if you're watching with others, your feelings about how you're feeling right now about your comfort level around DB? So, go ahead and put those letters into the chat.

Alright, seeing some coming through here. Thank you. Okay, looks like a few of you are kind of, like, you know, wishing you were at A. Maybe it's either like you're feeling like you're A is how you're feeling about DBI or maybe you just wish you were there right now. But some, I think, are still, you know, feeling like, "Oh okay, maybe I'm more on the B side." Maybe that's because we're moving, you know, to the end of the week now, so we're still, we're like, just get me to the end of the week.

I hope, as we continue forward, you're going to learn a little bit more about DBI in the next, you know, less than an hour now. And we hope when we do this self-check-in, again, at the end, you feel a little more confident with DBI.

[Slide 15 – What is DBI?]: So, what is DBI? Again, as I mentioned, Data-Based Individualization. There's three, sort of, primary characteristics. One, it's systematic. It's a process that we use, that we incorporate and help our teachers to learn to support their students that is systematized and very explicit. It relies on data. You heard this earlier, one of the teacher participants said its data-based and relies on research. We're using data to make decisions about what needs to happen next for particular students. And perhaps most important for our students at risk, our students on IEPs, it helps to individualize instruction. Many times, our students who are at risk in mathematics are, you know, things we've used in the past, those things don't work necessarily. And so, we need to go in and really consider what needs to happen next for these students.

What things do I need to change? Do I need to implement a different strategy? By the time our students get into middle school, they've had a history many times of failure or lack of success in area in mathematics in particular. And so, it may take some individualization to help compensate for that.

[Slide 16 – Define DBI]: In DBI there are two primary components that we're addressing. Assessment is one; everything from progress monitoring to diagnostic data. And then to continued progress monitoring in a cycle of, you know, examining responsiveness and non-responsiveness. Data is a primary component. And you'll learn a lot more about the assessments that comprise this Project STAIR process in our next webinar later in October.

[Slide 17 – Define DBI]: Instruction and intervention is also a primary component. So, we start out and we examine what's already in place for students in terms of core instruction, in terms of existing intervention. And then we are also looking at adapting intervention for particular students. We introduce teachers to different types of strategies and interventions, and then we use that data to adapt as needed.

[Slide 18 – Is ... Data-Based Individualization Is not ...]: Data-Based Individualization is a framework or a process. It's not necessarily like, a curriculum. We don't call it a curriculum or a single intervention. You can think of it as a framework or process. And sometimes we get asked, "Can I use DBI in other areas?" Absolutely. This process of DBI can be used in reading, can be used in writing. But we think it's a great project because we're uniquely focused on middle school mathematics for this particular Project STAIR.

[Slide 19 – Key Components of DBI]: So, I'm going to now turn it over to Stephanie and she's going to talk a little bit more about some of those key components of DBI.

Stephanie Hopkins: That's exactly right. So, we're going to move right into, if you're really new to DBI and some of these ideas to kind of give some more detail and key components about it. Go ahead Lembke.

[Slide 20 – Key Components of DBI]: To get us started throughout the rest of the presentation, you may see up in the righthand corner this icon of a camera. This means that you can access a Lightboard video on this topic that provides more information and strategies through our Project STAIR YouTube channel. And we have a huge variety of videos that provide in the moment strategies, content strategies, behavior strategies, and you'll be able to follow a link in a QR code at the end of the presentation. So, if there's a certain topic that we talk about, just feel free to jot it down throughout the presentation.

[Slide 21 – Key Components of DBI]: The graphic you see that Dr. Lembke already presented to you on the left is an introduction to Data-Based Individualization from the National Center on Intensive Intervention. DBI is a systematic method for using data to determine when and how to provide more intensive intervention.

I'm next going to talk about the five steps that really kind of are encompassing in this idea. So, step one is to establish that there is a Tier 2 validated intervention program in place with increased intensity, which means it could be a smaller group size or time allocated to that intervention. Dr. Lembke just did say this, but just a reminder that we are not here to or DBI is not one single intervention program or a strategy, it's really a validated process.

[Slide 22 – Key Components of DBI]: Looking at step number two, is going to be progress monitoring. You want to collect frequent progress monitoring data to determine whether the student is responding to the intervention that you put in place. So, if you decided to put student in a smaller group size, you really want to establish a present level of where they are at the beginning. You want to set an ambitious long-term goal and you want to collect frequent assessment data.

And using decision rules within DBI to make instructional decisions. DBI is not a one-time fix. It is not a static intervention program. So, it's critical to continue to take progress monitoring and make adjustments based on the data.

[Slide 23 – Key Components of DBI]: Step three is really thinking about being responsive to the students that you have in front of you. So, based on how these students are responding to your practice monitoring and taking in the data, you're going to continue the Tier 2 program with progress monitoring. And if the student continues to struggle, you need to collect diagnostic information to identify specific skills or deficits or behavior concerns.

[Slide 24 – Key Components of DBI]: Step four is we're going to be using that diagnostic data along with educator expertise to modify or adapt the intervention to better meet the needs of the

students' individual base needs on your hypothesis. So again, this really, the beauty about DBI is, it is specific to the student that you have in front of you, that you're really focusing in on.

[Slide 25 – Key Components of DBI]: For the final step, again, being responsive to what your student, how your student's responding to the interventions that you have in place. You're going to continue to progress monitor at regular intervals to determine if the student is or is not responsive to the interest instruction. So, it's this idea about instruction and assessment that Dr. Lembke earlier spoke about.

[Slide 26 – So does this DBI process really work?]: So, this idea of does DBI; does it really work? Does this process work? A teacher that we had a part of our project in February of 2018 really said that it drives instructional decisions and made them a better teacher. So, through their time, we're going to then talk about...

[Slide 27 – Types of Data]: Here we want to start talking about, we keep saying like data, progress monitoring, making instructional decisions. So, we want to take a moment for all of you to reflect. What types of data, if any, do you currently collect for your students in mathematics? So, if you want to put the number one through seven in the chat. If you do collect something that's not here, feel free to type that out in one or two words. And if you are not listening live and you're listening to the recording, feel free to pause, take a moment, jot down on a piece of paper what types of data that you collect in mathematics. And then be thinking about what type of information does that data collection provide you.

So, students see that people are doing a lot of state and district assessments, things like that. Okay great. I think this is just a good opportunity to be thinking about with the data that you're, that you get maybe on a weekly, monthly, or yearly basis, what information does this provide you to make meaningful instructional decisions?

[Slide 28 – DBI: Why do we use it?]: Next, we're going to talk about, we talked about the key components. So, now it's why do we use it, what's important to us?

[Slide 29 – Data-Based Individualization: Assumptions]: The first thing we're going to talk about is DBI is based on a number of assumptions. Many people use the term research-based and evidence-based interchangeably. Well, the terms are somewhat different. In that evidence-based intervention is one that has been shown through rigorous research or multiple research studies to result in much better learning outcomes for students who participate in the intervention.

Research-based often refers to only a single study or a study of a particular part of the intervention. So, when we think about evidence-based and research-based interventions they stand in contrast to educational approaches that are based on traditional convention belief and anecdotal evidence. So, next I'm going to talk about some of the assumptions that we have within DBI.

[Slide 29 – Data-Based Individualization: Assumptions]: Effective research-based individualization approaches exist, but it's impossible to predict whether these approaches will

meet the unique need of each individual learner. Just because one particular intervention or instructional approach works for a particular student, does not mean it's going to work for all of your students. So, if additional time works for one student, doesn't mean that that's going to work for the other student. They may need a smaller group intervention.

When we talk about; we can only hypothesize that any given instructional approach will work. So, thus we need to test, reflect and then make instructional decisions based on that. We collect ongoing assessment data and use them as evidence to determine whether an instructional approach is worth working for that student. So, it's important, again as I said, that ongoing assessment data for instructional decision making should reflect critical academic skills and that they should improve over time. Now I'm going to talk about why we implement DBI.

[Slide 30 – Why Implement DBI?]: If it's kind of not, if I haven't sold you on it yet, DBI really provides a framework for individualized instruction. So, it's great because you don't need to be in a district or in a place where you're waiting for some boxed curriculum money or something to arrive to be able to implement these strategies. It's something that you can implement tomorrow. When teachers use DBI correctly, student achievement can improve. Many students respond positively to research-based interventions that are implemented with fidelity.

So, finding these smaller steps into intervention. Yet, a small number of students do not benefit sufficiently from these interventions. These students require more intensive instruction beyond maybe what Tier 1 or your curriculum already provides you. Thinking beyond, again, those students who kind of fit in that bubble that Dr. Lembke was talking about, who don't always fit in those needs. And again, it provides a framework for teachers to individualize systematically and effectively. So, finally, when we think about, okay, I'm sold. I should implement DBI. The question is who?

[Slide 31 – Who should receive DBI?]: What students do we want to talk about? DBI is intended for students who require intensive individualized instruction. So, if core instruction or supplemental intervention isn't sufficient, they're still struggling. A student who's identified as a Tier 3 instruction, if you're working within the RTI model, or students who are in, possibly have been identified in, Special Education. DBI is reserved for students who have the most intensive needs.

As you can see through our graphics and all the decisions and the progress monitoring. It is not meant for a large scale of students. To do it focused and intently, you want to talk about a smaller number of students. It is appropriate for students identified as having an educational disability covered under IDEA. Most other students should be responding to core instruction or standard treatment protocols. DBI may require individualization learning content within small groups depending on the skill levels within that group. So, now that we've kind of talked about who, what it is and who should receive it. Stacy's going to start talking us through.

[Slide 32 – In-Person Strategies to Support DBI]: Those students who are actually maybe right in front of you this year. You are lucky enough to have them.

Stacy Hirt: Yeah, so now that we know who should receive DBI, let's chat strategies. When implementing in-person strategies to support DBI, a team of teachers and interventionists should utilize the DBI framework to implement four key practices. First, determine when an instructional change should be made. Second, how to make the change. Third, develop a plan that matches student need. And fourth, continue collecting data to see if the changes are working. So, remember just as Dr. Lembke and Stephanie shared, DBI is a fluid process. It is not one single intervention.

[Slide 33 – Taxonomy of Intervention Intensity]: When implementing in-person strategies to support DBI consider intensifying seven dimensions of Taxonomy. Use Taxonomy to support the student that is not responsive. These dimensions support the DBI process and the learner needing intensive intervention academically and behaviorally. So, this slide is actually a snapshot that highlights the NCII Taxonomy of Intervention Framework. This Framework is anchored by Fuchs, Fuchs, and Malone (2017). And you can find more information about this handout at the NCII website.

[Slide 34 – DBI Process & Taxonomy Dimensions]: Today I'd like to chat about these seven dimensions of Taxonomy. We're going to hit strength, dosage, alignment, attention to transfer, comprehensiveness, academic and behavioral support, and individualization. So again, that I in DBI.

So, a quick question. How does Taxonomy of intervention intensity fit in the context of the DBI framework? If you would go ahead and use your chat box and share with me how you think Taxonomy fits in the whole DBI framework. Okay, nice. So, this is actually a trick question. If you would, Dr. Lembke, move to the next slide.

[Slide 35 – DBI Process & Taxonomy Dimensions]: The seven dimensions of Taxonomy are actually embedded throughout the whole DBI process. So, these seven dimensions complement the five steps of DBI from beginning to end. And again, it's not really beginning to end because it is a fluid process. Let's first examine strength.

[Slide 36 – Strength]: Academically and behaviorally, strength translates to how well the program works for students. So, how do we know if it's working or not? Well NCII and actually What Works Clearinghouse has; they've done the hard work for you. They have validated these resources to validate which programs are effective and evidence-based and which are not. So, just ask, is your intervention, is it expected to lead to improved outcomes?

[Slide 37 – Dosage]: The second dimension examines dosage. Academically, dosage means the number of opportunities a student has to respond, receive positive feedback, receive reinforcement and receive corrective feedback. Ask if your intervention. Will the group size, duration, structure and frequency provide sufficient opportunities for the student to respond?

[Slide 38 – Alignment]: Next, our third dimension, hits Taxonomy and its alignment. So, alignment means how well the program addresses the target student's full set of academic skills. We're not looking at skills that the child has already mastered. We're looking at the academic

skills where they're deficient or where there's a deficit. Alignment incorporates a meaningful focus on grade appropriate standards. So, ask does your intervention match the student's identified needs?

[Slide 39 – Attention to Transfer]: Our fourth dimension, addresses attention to transfer. Attention to transfer means the extent to which an intervention is designed to help students transfer the skills they learned to other contexts. Realize connections between mastered and related skills. So, ask does the intervention assist the student in generalizing the learned skills to General Education and other tasks?

[Slide 40 – Comprehensiveness]: Our fifth dimension of Taxonomy highlights comprehensiveness. Comprehensiveness means the number of explicit instruction principles the intervention incorporates. So, that "I do, we do, you do." Comprehensive means the extent to which the intervention includes simple direct language, modeling, practice in incorporating a systematic review. So, ask the intervention, does it include some or all of the elements of explicit instruction?

[Slide 41 – Behavior Support in Academic Interventions]: Our sixth dimension, targets behavior support and academic interventions. What we have learned is academics and behavioral is bi-directional. So, academically our behavioral; we should embed in behavioral programs that can be easily integrated within the context of academic instruction, complements the academic focus and includes procedures for reinforcing responses. Here's a tip. Behaviorally academic programs should include self-regulation, executive functioning components, and behavioral principles to minimize non-productive behavior. So, ask is the intervention easily integrated into academic instruction?

[Slide 42 – Individualization]: Lastly, the seventh dimension of Taxonomy highlights individualization. So, again the I in DBI. Interventions can support the in-person learner academically and behaviorally by first implementing validated data-based process of individual individualizing intervention. This should be systematic over time. And second, individualization should support the DBI process through ongoing project progress monitoring to address the student's complex learning needs. So, ask can the intervention be individualized with DBI to meet the students' needs? The last, the seven dimensions of Taxonomy of intervention intensity.

[Slide 43 – DBI Process & Taxonomy Dimensions]: All seven dimensions of the Taxonomy of intervention are actually embedded through the five steps of DBI. Next, Alain is going to share with you some ways to layer virtual interventions in person.

[Slide 44 – Virtual Strategies to Support DBI]: Alain Mota: That's right, thanks Stacy. Well, we will now discuss what DBI might look like in the virtual environment. Remember that some of the examples that we share today in the presentation have been provided by practitioners in the field or by personal experience. So, therefore should not be viewed as endorsements but more things to prototype and continue to learn from.

[Slide 45 – Build Community]: A number of studies have shown that online learners link experience satisfaction to instructor social or virtual presence. Interaction and presence is key, which should be a part of building a supportive community. Make sure that you take time to ask how they are feeling as DBI promotes a lot of individual work with the student. Making the students feel comfortable and allowing them to elaborate will establish that you are concerned, and care really goes beyond just the content. Get to know them beyond the academic.

Asking questions, like what's your favorite show, what music you're listening to, what apps are you using? How are you communicating with your family and friends are easily things that you can continue to promote that community? Some of the community building can also go beyond the virtual. So, sharing something that Susan Yergler, author of the article "How to Create Community in the Virtual Environment." She suggested things like driveway visits, phone calls, letters in the mail. These are some things that you can actually promote to do that are going to bring both a smile to you and the students.

[Slide 46 – Funny = Fun]: In the spirit of building community, today we're going to have some fun. Use your chat. Look at these five figures. Five representations of twenty-twenty and share with us, which letter actually represents you during this year. Some of the things that you can do with the middle schoolers then is to actually use some of these responses to provide opportunities to create tables or represent them graphically. You have an opportunity to both integrate the emotions of the students, building community and actually create some opportunities for math to happen. I'm going to give you a couple of minutes to actually use your chat box to let us know which of these five Nicholas Cage represents your twenty-twenty. Okay, so moving on.

[Slide 47 – Ensure Understanding of the Work Space]: Remember for the people that are not with us today, you get an opportunity to use that strategy with your students and reflect on a poster like that virtually and maybe even around a PLC that might be a lot of fun. So, moving on, we're going to talk about ensuring understanding the workspace. In the virtual environment, things that might seem intuitive, for some, might be completely foreign or difficult for others.

The first thing that you need to do is ensure that whatever Learning Management System you're using, that the student is capable of seeing the material and really documenting their work and their efforts in a way that is really productive for them. If students are familiar and comfortable with the workspace, there's a higher possibility of success deploying our DBI strategies. The Learning Management System should be used to introduce concepts and manage flow of information with your asynchronous activities so that you will increase the student contact time with you. And specifically, for DBI, think about a way that LMS can assist you in collecting data. Collecting data consistently will increase its comfort with it and the system over time.

[Slide 48 – Make Your Synchronous Time Interactive]: The next thing that we're going to talk about is making your synchronous time interactive. You will not only increase engagement by developing slides where students can interact, but you will also mimic the act of observing students performing a task. A virtual whiteboard, or even a presentation slide that the student can actually manipulate, allows you to see their work in real time. Some platforms that I put right here as an example, like Jamboard from Google or Mural are very user friendly. The use

of manipulative objects virtually, such as Brain Camp, which has a three-month trial has features that are useful for DBI, such as algebra tiles, fraction circles, or just practicing operations.

Specifically for DBI, DBI specifically addresses the use of fluency and the use of manipulative objects. So, these whiteboard platforms will allow the teacher to interact with the students, mimic virtually moving and manipulating virtual objects. So, you want to ensure that these occur three to five times a week for probably twenty to thirty minutes. I actually left a tiny URL linked to the Mural so that you guys can actually go and play around with that platform and really help the students interact with that. It provides an opportunity for you to play around with it.

[Slide 49 – Consider the Learner When Setting Your Asynchronous Tasks]: Consider the learning if you are using DBI through the use of videos, ensure that the videos do not exceed the attention span of the learner. In your asynchronous task, videos can be easily broken down into more manageable parts using PowerPoint or Google Slides. There's evidence that the students tend to start losing focus on videos after nine minutes. Keep them short and the videos will be way more productive. Students also prefer to see you working out the problem.

Using things like Screencastify or even the record button on the Zoom can actually allow you to upload videos with you as the main character. Students specifically supported by DBI will respond to small, productive, asynchronous activities. Video time should match the students age as a starting baseline.

[Slide 50 – Engage in Dynamic Mutual Feedback]: So, very important, engaging in dynamic mutual feedback, as part of DBI assessment and progress monitoring can be enhanced using virtual tools. These tools allow students to have interactive experiences and engaging in creative ways of responding and communicating virtually. Allowing the students to provide feedback in the forms of videos or chats can further deepen the sense of community and continue to set habits for students that will promote the use of benchmarking or analyses. These platforms like Flipgrid or Socrative can be used to check for understanding or check individualized progress monitoring.

[Slide 51 – Use Project STAIR Videos]: Finally, the one thing that we will endorse is our actual Project STAIR videos. We have had a link right here and a QR code. We have a myriad of playlists that range from best practices from teachers and classroom management strategies to actually content specific material like teaching Quadratic Expressions, Fractions, Geometry and a whole lot more. So, ensure that you visit our YouTube virtual playlist. It's been a pleasure talking to you and now I leave you with Dr. Erica Lembke.

Dr. Erica Lembke: Great, thank you so much Alain, Stephanie and Stacy for sharing that. We've spent a lot of time working on these videos and we really hope that you'll find that they're helpful. They're free to access and we literally have, you know, over a hundred of them ready for you to utilize. And so, we really hope those can be an advantage to you as you consider working with your students in this virtual environment.

[Slide 52 – DBI Self-Reflection Check-In]: Okay, so now we're going to go back again. Many of you maybe didn't indicate "A" for your comfort level with DBI at the first check-in. So, maybe you put, you know, "D". But let's go back again. Knowing what you know now about DBI, what you've learned so far in this session, indicate either in the chat or if you're watching the recording indicate to the rest of the participants in the room or on paper/pencil what's your comfort level now with DBI.

Okay, good. Starting to see some A's. C's rocking it. Yes, good. Okay, still got B in there. Good, very comfortable. Thank you. Great. Okay, good. A lot of you are very comfortable, still a couple like "whoa" B's. As a reminder, this session is being recorded and you'll be able to access it later. We mentioned at the onset but, we will have a Facilitator's Guide with guided notes for you to utilize that should be posted in just a few days. And so, you can use that along with the webinar if you want to share this content.

[Slide 53 – Conclusion]: Okay so, just to kind of go back through what we've talked about today, DBI is... And I'll sort of leave some time for you if you wanted to say the answer out loud, if you wanted to jot it down and then I'll go through these. DBI is data-based individualization. And those basic components of DBI. What are those basic components that we talked about at the outset?

You've seen a few different diagrams. Basic components include assessment and intervention. All of that is driven by that data-based decision-making process. One assumption of DBI. What were those that Stephanie talked a lot about those assumptions of DBI. What was one of those assumptions? So, I think one that we often hear, maybe you can think of others, is that we can't assume that because we've used an intervention with students in the past that that intervention will automatically work for our students with whom we're working now or will work with our students most at risk.

And so, we have to use data to support whether that intervention is working with students. So, that's one assumption of DBI that we have to use data because not all, it's not a one-size-fits-all; not all interventions fit for all students with whom we work. Intervention intensification, Stacy talked a lot about intensification and even categorized several areas where we might intensify. What is one area where intervention intensification might occur? Think back to those areas. You might be thinking also about a student with whom you're working and a way that you might intensify for that student. Some of you might have indicated that you might provide some behavioral support to a student. That's one of our areas of intensification. I think I often think of that one because many of the students with whom we work have greater or lesser needs in the area of behavior support, everything from, sort of, on task behavior to true, sort of, disruptive challenging behavior. And so, we're trying to think about how behavioral support might help support their academic needs.

Finally, just as a review, one way to support DBI while teaching virtually? So, this is the content that Alain just spoke about. What were some of those strategies that he spoke about? What would be one of those to support students while teaching virtually? So, I loved the one that he spoke about where he talked about engaging in dynamic mutual feedback. How can we continue

to use tools like Flip Grid or Socrative to help work with students and engage in, kind of, that mutual discussion? We know that engagement is key. And so, really thinking about how that would complement your virtual learning.

[Slide 54 – Questions]: So, we have a few questions in chat that we'll answer. As a reminder, you can send some other questions through chat. I'll just read a few of those and I can try to answer, but the rest of the team, if you want to unmute your videos you can jump in for sure, too. And then before it's time to go, I'll just wrap up with a few housekeeping items. So, thank you very much for submitting some of those questions in the chat as we went along.

One of the first questions asked: How is this different from an IEP? And so, in an IEP we have things like measurable data, we have a PLEP, we have goals, objectives, we monitor progress. How does this process differ from an IEP? I would say a couple of things. One, I think if you have a high quality IEP process that these things should be a part of that. We don't always see that. Unfortunately, sometimes we don't see, you know, middle school math progress monitoring for instance. Ideally, we want the goals that you set in your IEP for students to match the instructional practices and the assessments that you're using. So, you definitely can consider that. But I will say that this DBI process is definitely for; can be used more broadly. We use it with many students who are at risk and maybe have not been identified for Special Education.

So, it's a process or a framework that you can use for a broader population. Depending on the state for our project, we've worked with both Special Ed. and Gen Ed. teachers. Sometimes we're using DBI in large Gen Ed. classrooms with multiple students who are at risk in that classroom. But that's sort of how I see the portions of the IEP and how those kind of align or fit with that DBI process.

Let's see, so another question and we may have to get back to you on some resources for this. But another question that was posed, and that's a great one. I teach blind and visually impaired students. Are there any other participants that also teach VI students? Some cannot see the visuals. And what they are using? So, someone looking for resources, ideas from us. Any other panelists, right off the top of your head? Anything you can jump in and add? If you don't, I can try to direct. But, anything right off the top of your head that you might add?

One thing this is, it's an important question and always a little bit more difficult to think about how to meet the needs of some of our students with those lowest occurring disabilities. I would say that in at least the case of the diagnostic assessment we use. Leanne and her group will talk more about this at our next session later in October. But we use the Diagnostic Online Mathematics Assessment, the DOMA, and it does have auditory prompts. And so, certainly we could have the auditory piece. Of course, there would still be some adaptations that would need to be made, where the student indicates, perhaps aloud, the answer instead of, you know, clicking on the answer. So that's one quick way that I know that we could adapt. I'm trying to think of some of our other, some of our strategies that we use for teachers and students.

We definitely use a lot of auditory explanation and there may be existing manipulatives in the classroom that a teacher who works with students who are blind or visually impaired may

already have some of those, like hands-on manipulatives that are used for his or her class. And so, those existing tools could be used. And then we could teach the teacher, or you could learn from some of our videos some additional strategies that could be used with those existing tools.

I'd encourage you to take a look at some of those videos and see if that might be a good match. Okay, let's see. So, another question that was asked, let me just pull those up again. Another question was I'm working on earning my LBS One. What kind of assessments will we be using in high school? So, I'm not quite sure what LBS One is. But as far as the assessments that are used as part of our project, we've been using those primarily with middle school students. I would say that for our students at risk as they move into high school, many of those types of assessments would still be relevant. So, we're using assessments like progress monitoring tools. Sometimes we have to use, you know, oftentimes we have to use progress monitoring tools and math that are at a grade level that's much lower than the current grade level for the student.

We want to meet them at their instructional level. So, sometimes that means jumping down to even, you know, a second or third grade level. I mentioned before the DOMA, the Diagnostic Online Math Assessment. That certainly could be used as students move up into high school. Some of these assessments are used more broadly to address how students are doing in foundational concepts of math and some of our assessments we use for the research side to actually assess preparedness for algebra. And so, we've used like the Iowa Algebra assessment for preparedness for algebra. But, generally for most of you who are on the call, who are kind of living this, doing this day-to-day. Those progress monitoring and diagnostic assessments would be most appropriate. Okay, let's see what else we have. Okay, another question that came through.

What do I do to intensify for my learners who are at home right now? So, Stacy talked a lot about intensification. Alain talked about those virtual methods. But, what do I do to intensify? That's pretty tough right now because I've got, you know, I've got students who typically I could work with them face to face, but you know they're signing on via Zoom or some other platform. Panelists, quick ideas about how you can engage those students in intensifying in these online environments?

Stacy Hirt: Sure. The same strategies that work in the classroom will actually work virtually. So, the opportunities to respond as a whole group or individually in the breakout rooms or positive to negatives using the annotate feature, chat box, you know however you can to get the reinforcements. It could be text or email. But, so just kind of thinking of it a little bit differently when it comes to OTR's and positive to negatives. Engaging that learner just a little bit differently but the same strategies apply.

Alain Mota: One of the platforms that we talked about or shared with allows the students to actually post responses in real time. And it mimics really well putting kind of stickies on a whiteboard. And I found out that even though you're not connecting, if you're not connecting visually or audio visually, that the students can still respond using that platform. And you, as a teacher, can also still see the response in real time. And that creates a really unique situation

because it engages in a dialogue that really allows both the teacher to see what the students are thinking and maybe even start to see some of those misconceptions or some of those things that they need to start reinforcing in their one-to-one, face-to-face even if they as they do it virtually.

So, I think some of those are avenues or activities where they can actually interface with the platform versus doing it face to face with the teacher. Those might be good ideas to start prototyping.

Dr. Erica Lembke: Yeah, that's good. I think, you know, I said this before, and you mentioned it too Alain. To me, like intensification, as you're working in virtual environments, is all about engagement with those individual students. So, whether you can move them to breakout rooms at some point and have some dialogue. I've heard of some teachers, I know this isn't always possible, but like mailing even like a little packet of things that you know the student can actually look at. Certainly, there are lots of virtual ways to share PDFs and use things like Notability, you know, to mark those up. I'd really encourage you, Amy posted the link to the NCII document that was recently released on Intensification Strategies for Mathematics. And as Stacy was talking through, Amy also linked to this recent support from NCII. And so, I encourage you to take a look at that as well.

We had one more question. This question asked, we're doing this work in middle school math, but could we do this work in a different grade, like in early elementary? Absolutely. You know, this process, this DBI process applies broadly across all of the work that we're doing with students who are at risk academically and sometimes behaviorally, as well. And so, we wanted to continue to think about how we can apply this process.

I have another project where I'm working on early elementary writing and we're applying the same kind of model. So, yes. The answer is emphatically yes. You'll find just a ton of resources on DBI more broadly on the NCII website many other webinars, materials, slides. So, if you're interested in DBI more broadly, I'd encourage you to take a look at the intensiveintervention.org website. So, I'm going to move us along. We really appreciate your participation in our webinar today.

[Slide 55 – Remember our next two Webinars]: We really enjoyed being able to talk a little bit more. We had participants today on from Alaska, Connecticut, you know all over. And so, we really appreciate it for those of you who are watching this later and we're really pleased to be able to offer this to you at your leisure, at a later time. I really encourage you to join us for our next two webinars in the series. Dr. Ketterlin Geller and her team will lead a discussion on October 22nd on more of the assessment side of things. And then on November 4th, Dr. Sarah Powell and her team will talk about teaching mathematics and making adaptations. So, we'll look forward to those sessions. Those will be also recorded, and we will have infographics for you to share as well as Facilitator's Guides for those sessions.

[Slide 56 – Thank you?]: Finally, just to wrap up. Again, we have our QR code for our YouTube channel. Check us out. Follow that channel. We'll be continuing to update those videos as we're able to get down to Austin and shoot some more of those in the Light Board

room. Also, we do have a website, it's right at the bottom there, it's blog.smu.edu/ProjectSTAIR. We've posted some technical reports, some of our professional development sessions some of our papers. So, we encourage you to look there. And we're also a very active group on Twitter and so if you are as well, we'd love for you to follow us at Project STAIR. And so, we hope to get some new followers either today or when you're able to watch this.

Again, I want to thank our partners the National Center on Intensive Intervention and thank my co-hosts Stacy Hirt, Stephanie Hopkins and Alain Mota for joining us today. And I hope it's been a helpful session to you. We appreciate so much all of our educator friends out there and we look forward to hearing stories about how you're implementing DBI! Thank you!