

Why "Evidence-Driven" Instructional Leadership?

Welcome to Module Two of the Virtual Instructional Leadership Challenge. I'm Justin Baeder. And in this section, we're going to explore the nature of teaching and instructional leadership and why it's so important to take an evidence-driven approach. Several years ago, I had the opportunity to interview the great Charlotte Danielson about her book, "Talk about Teaching! Leading Professional Conversations".

And while Danielson is best known for her framework for teaching, the teacher evaluation rubric that's used all over the world, I think some of her best work is in this book, "Talk about Teaching". And I wanna share a quote from the early pages of that book, where I think she very accurately describes the nature of teaching. She says, "Teaching entails expertise; like other professions, professionalism in teaching requires complex decision making in conditions of uncertainty". "If one acknowledges, as one must, the cognitive nature of teaching, then conversations about teaching must be about the cognition."

And that my friends, is why, I believe in taking an evidence-driven approach to instructional leadership. If we want to talk about the heart of teaching, the cognition behind what we're seeing in the classroom, we've gotta start with what we can actually see, but we can't stop there. We start with evidence, but we have to use that evidence as a gateway into the real substance, which is the thinking, the teacher cognition that serves as the heart of teacher practice. So the evidence-driven philosophy goes a little bit like this, that teaching, like instructional leadership, is largely about making decisions. It's largely about deciding what to teach, how to teach it, what students already know, how to approach it, how to meet the needs of individual learners.

There are so many decisions that teachers make that if we forget that that decision-making is really the crux of teaching as a professional practice, then we're going to miss the point. And a lot of our feedback conversations are going to miss the mark. When we have better evidence of teacher practice, we make better decisions as instructional leaders, and when teachers have better evidence to work with, they make better decisions for their students.

And the primary task that we have the opportunity to engage in, as instructional leaders, is conversation about teacher practice. And if those conversations are going to be more than just philosophy, if they're going to actually be about the teacher practice and improving it, then we need evidence, right? We need evidence to have something to talk about, but then we need to actually talk about that evidence, make sense of it, and have the opportunity to improve that decision-making. So as a starting point, that philosophy of being evidence-driven is a little bit more than being data-driven, right?

We're not simply looking at student assessments and saying, okay, well now we know what we need to do. What we need to do after we look at student assessments is often think and make sense of those assessments. And I wanted to put this idea of being data driven into the proper context, because often I think there's this perception in the profession, that all we need to do is look at data and then we'll know what to do. And that, my friends, is not the case.

There is a model called the DIKW pyramid that that says basically that, we can go up levels of abstraction and levels of kind of processing to get higher in the pyramid. At the very base of the pyramid is simply data, right? Data is the kind of, you know, the raw numbers, the assessment results, or whatever kind of data we're working with, and when we add meaning to that data, we transform it into information. And that transformation process occurs at every step of the pyramid. So when we make sense of data, we have information, when we make sense of information and make meaning out of that, we have knowledge. And when we make meaning out of knowledge, we have wisdom.

And don't we all wanna be wise as instructional leaders? Don't we want the teachers that we work with to be wise, as they make decisions for their students? Ultimately, where this is all headed is better decision-making. So if we were to add kind of a new cap to the pyramid here, the top level would be the decisions that we're making. And as you may recall, in Module One, we talked about instructional leadership as the practice of making and implementing operational and improvement decisions in the service of student learning. And as we saw in the quote from Charlotte Danielson just now, teaching really is cognitive work. It's all about the decisions that teachers are making on behalf of student learning in their classroom.

So we have an opportunity, as instructional leaders, to engage in what I call sense-making conversations with teachers. As we're talking about the evidence, as we're talking about the decisions, we're making sense of teacher practice with the teacher in what's inherently, a social activity, right? Talking with another person is inherently a social activity. And the teacher's identity, the teacher's sense of self as a professional, as a person who is competent, you know, a person who has a history as a professional, all of those are relevant to that conversation. And we use some of the context clues of the particular teaching situation and in our own kind of stories that we tell about ourselves to arrive at plausible conclusions.

And this is what Karl Weick called sense-making. Now a lot of my doctoral research on kind of organizational decision-making centered on Weick's work around sense-making. But I wanna position feedback conversations as a fundamentally social sense-making activity and not simply the transfer of a suggestion from the instructional leader to the teacher. I believe that teachers change their practice as a result of sense-making conversations, not as the result of getting feedback or getting a suggestion from someone who's just observed them. And I think that the difference between those is massive, right?

If I am going to observe for a while and write down some feedback, and give it to the teacher without talking to them, and they're supposed to just kind of look at that feedback and decide whether to implement it or not, my odds are probably not very good in actually changing teacher practice, right? If I want to change that teacher's practice, the best thing for me to do is to make the time to sit down and talk with that teacher about what I saw, talk about our shared expectations, get some insight into the teacher's own thinking and decision-making, and from there, I will have a much better opportunity to actually change teacher practice. And that's what we call a sense-making conversation.

So now that we've introduced some of these concepts, I wanna encourage you to go to your jour-

nal and think through your own experience. And even outside of your work as an educator, think about your own life, your own values, your own belief system, and reflect on this. When has a conversation that you've had with someone else, again, doesn't have to be in a professional context, led to a change in how you think? And especially a change in your practice? Maybe it was about recycling, maybe, you know, you're of an age that recycling was not universal when you were a kid, so at some point along the way, you decided to start recycling, maybe somebody had a conversation with you.

Think about a conversation that has changed your perspective and changed your practice, and make some notes about that in your journal. And then I'd like you to reflect on the second question here, how did evidence factor in to this conversation? I'm going to guess that it wasn't entirely abstract, that there was some form of concrete evidence that factored in to your change in perspective or practice. Think about that, and when you've completed that part of your journal, you're ready to move on to the next section.

Drawing on Richer Sources of Evidence

If we're going to practice, evidence-driven instructional leadership and if we're going to have evidence-driven, sense-making conversations with teachers, then we've gotta make sure that we have good sources of evidence. So let's talk now about some different sources of evidence that we can use for evidence-driven instructional leadership. And again, this is based on the idea that teaching is professional work, right?

That if we're going to change teacher practice, we have to recognize that teaching is primarily cognitive work. It is primarily decision-making work that teachers are doing and if we want teachers to be able to make better decisions then they have to have better evidence. We have to have good evidence available to us as leaders that we're providing feedback based on. And we have to have a sense... a chance to make sense of that evidence with teachers in conversation.

So a feedback conversation cannot simply be a suggestion. It cannot be a one-way transfer of a suggestion from the instructional leader to the teacher. We have to have shared evidence that we're talking about and making sense of. So in this section we're going to talk about five different types of evidence that may factor in to a feedback conversation. We're going to talk about research, direct observations conversations themselves, which can also serve as a form of evidence, student work and assessments. So let's jump right in to those.

When it comes to evidence of best practice, we have loads of research. If you look on your bookshelf right now, you probably have tons of books that are based on research that has been done into effective teaching practices. And probably the most well-known recent summary of that research on best practice is in the work of John Hattie, right? The Visible Learning Research, where Hattie examined over 800 different meta analysis studies to figure out, okay, if we do this, what's the typical effect size of that particular practice? Or if we do that what can we expect the effect size to be?

In general, we know that from the research and then we can make a specific application of a strategy. And that's valuable because no matter how good we are at implementing a mediocre strategy, we're still probably going to get mediocre results. And on the other hand if we employ a strategy that's known to be highly effective, even if we don't get it perfect, it's probably going to have some impact just by nature of what we already know about that strategy's effectiveness. So Hattie says no vi impact, be aware of the impact of the strategies that you're using. And then it's up to us in the local context to figure out how to use those strategies effectively, right?

Knowing that it's not automatic if we use XYZ strategy that we're going to get great results. We have to do some things as educators to get it right. But the starting point is of course, best practice. So in our feedback conversations we should often be referencing that research that tells us what works in education and to what extent those practices are effective. And again, effect sizes are often how we measure that. We often refer to those best practices in the next type of evidence. And that is the evidence that we gathered during teacher observations. So one of my favorite books about teacher observation and one that shaped my career as an elementary school principal was Kim Marshall's book "Rethinking Teacher Supervision and Evaluation."

If you have not read "Rethinking Teacher Supervision and Evaluation" I highly recommend it. And there are some fabulous insights into how to get more out of the traditional observation process. And I have to give a lot of credit to Kim Marshall for shaping my thinking on feedback conversations. So if we move into the third form of evidence that's going to come up is the third form of evidence is actually the conversation itself. And this was a key insight for me as a principal.

When I realized that simply observing didn't tell me everything I needed to know. I actually had to talk with the teacher and have one of those sense-making conversations to truly understand what I had observed. And I discovered at first I thought this was just a matter of my own lack of expertise. If I'm observing kindergarten literacy and I've never personally taught kindergarten, I was a middle school science teacher. I discovered that it wasn't just a lack of knowledge on my part though, there was something fundamental about the limits of observation as a form of evidence. I simply don't know everything that's going on in the teacher's head just by observing. I have to actually talk with the teacher to get that additional insight and to get that additional evidence into what is really the heart of practice. And that is the teacher's decision-making, their thinking. Their cognitive work as Charlotte Danielson would say.

So a third form of evidence is the conversation itself. If we're going to practice evidence-driven leadership of course, we've got to look for evidence at all levels. And that includes student work. And I don't want to jump right to data here, I wanna look at the actual work that students are doing. And you might've might've come across books like Matt Renwick's book on portfolios and how we can capture and share student works. That we can actually look at student thinking as crystallized in their writing or maybe the practice problems that they're doing or a project that they're working on. There are lots of different books on protocols for looking at student work but this is something that as a profession, especially at the administrative level, that we often skip entirely.

We do not often enough look at student work as a rich source of evidence. What we instead do is we try to simplify it for ourselves and we tend to look at data. It's much easier to get large numbers of students data into a spreadsheet. It's harder to look at individual work samples. So I think there's been a lot more attention to data in our profession. And we certainly need to look at the patterns that only appear when we do have a spreadsheet, we do have actual numbers that can be sorted and averaged and dis-aggregated and all the different operations that we do with data. So assessments, I would say is kind of the final major category of information that we're looking at, but in a feedback conversation, we need to be open to using all of those sources of evidence, right?

We talk about the research, we talk about the best practices. We need to be able to talk about what we saw in an observation. We need to be able to talk about what was happening and treat the conversation itself as a source of evidence, as a source of insight into what the teacher was thinking. We need to be ready to look at student work and at the patterns, the data in terms of student assessments. And when we don't have the ability to directly get into classrooms.

Think for a moment about what would happen if we were depending only on direct observation? What happens when we're no longer able to do direct observation, right? We can maybe get a video clip. Maybe we can join a zoom class or watch a video that the teacher has prepared, but

what's missing, right? Obviously we can talk about that video or that clip or that online class that we saw but I don't think that's quite enough. I think we need to be ready to pull in other forms of evidence to have rich enough conversations. So I've heard a lot of questions this year from people wondering, how can I kinda join my virtual classes that are happening? Can I join as a participant? Should I do pop in observations in the zoom classes? Should I join, like the students do and just kind of observe that way? And if you wanna do that, I think that's fine, but I don't think it's helpful in terms of completely replacing all of those sources of evidence that we really do need.

Just as it was never really enough to go to a classroom in person, that was not enough as a source of evidence. And it's certainly not enough on video. We need richer sources of information because I believe, and we'll talk about this further in the next section, but I believe that when we do observe, whether that's in person or on video, that what we are seeing is just the tip of the iceberg. We are only seeing what's visible above the surface.

And a lot of what matters most in teacher practice, the thinking, the planning, the assessing, the decision-making is hidden beneath the surface. And we'll talk more about the nature of those aspects of teacher practice and how to get at them in the next section. For now in your journal, answer these two questions. What sources of evidence do teachers rely on when talking with their colleagues, for example, in their PLCs?

So what sources of evidence are teachers already using even apart from feedback conversations that they're having with coaches or administrators, what evidence are they using in their own collegial conversations? And second, what sources of evidence are available to you at the moment? Based on how school is currently operating, knowing that that may change from day to day, what sources of evidence are available to you? Answer those questions in your journal, do some reflection. And when you've done that, you're ready to move on to the next section.

Drawing on Richer Sources of Evidence

If we're going to practice, evidence-driven instructional leadership and if we're going to have evidence-driven, sense-making conversations with teachers, then we've gotta make sure that we have good sources of evidence. So let's talk now about some different sources of evidence that we can use for evidence-driven instructional leadership. And again, this is based on the idea that teaching is professional work, right?

That if we're going to change teacher practice, we have to recognize that teaching is primarily cognitive work. It is primarily decision-making work that teachers are doing and if we want teachers to be able to make better decisions then they have to have better evidence. We have to have good evidence available to us as leaders that we're providing feedback based on. And we have to have a sense... a chance to make sense of that evidence with teachers in conversation.

So a feedback conversation cannot simply be a suggestion. It cannot be a one-way transfer of a suggestion from the instructional leader to the teacher. We have to have shared evidence that we're talking about and making sense of. So in this section we're going to talk about five different types of evidence that may factor in to a feedback conversation. We're going to talk about research, direct observations conversations themselves, which can also serve as a form of evidence, student work and assessments. So let's jump right in to those.

When it comes to evidence of best practice, we have loads of research. If you look on your bookshelf right now, you probably have tons of books that are based on research that has been done into effective teaching practices. And probably the most well-known recent summary of that research on best practice is in the work of John Hattie, right? The Visible Learning Research, where Hattie examined over 800 different meta analysis studies to figure out, okay, if we do this, what's the typical effect size of that particular practice? Or if we do that what can we expect the effect size to be?

In general, we know that from the research and then we can make a specific application of a strategy. And that's valuable because no matter how good we are at implementing a mediocre strategy, we're still probably going to get mediocre results. And on the other hand if we employ a strategy that's known to be highly effective, even if we don't get it perfect, it's probably going to have some impact just by nature of what we already know about that strategy's effectiveness. So Hattie says no vi impact, be aware of the impact of the strategies that you're using. And then it's up to us in the local context to figure out how to use those strategies effectively, right?

Knowing that it's not automatic if we use XYZ strategy that we're going to get great results. We have to do some things as educators to get it right. But the starting point is of course, best practice. So in our feedback conversations we should often be referencing that research that tells us what works in education and to what extent those practices are effective. And again, effect sizes are often how we measure that. We often refer to those best practices in the next type of evidence. And that is the evidence that we gathered during teacher observations. So one of my favorite books about teacher observation and one that shaped my career as an elementary school principal was Kim Marshall's book "Rethinking Teacher Supervision and Evaluation."

If you have not read "Rethinking Teacher Supervision and Evaluation" I highly recommend it. And there are some fabulous insights into how to get more out of the traditional observation process. And I have to give a lot of credit to Kim Marshall for shaping my thinking on feedback conversations. So if we move into the third form of evidence that's going to come up is the third form of evidence is actually the conversation itself. And this was a key insight for me as a principal.

When I realized that simply observing didn't tell me everything I needed to know. I actually had to talk with the teacher and have one of those sense-making conversations to truly understand what I had observed. And I discovered at first I thought this was just a matter of my own lack of expertise. If I'm observing kindergarten literacy and I've never personally taught kindergarten, I was a middle school science teacher. I discovered that it wasn't just a lack of knowledge on my part though, there was something fundamental about the limits of observation as a form of evidence. I simply don't know everything that's going on in the teacher's head just by observing. I have to actually talk with the teacher to get that additional insight and to get that additional evidence into what is really the heart of practice. And that is the teacher's decision-making, their thinking. Their cognitive work as Charlotte Danielson would say.

So a third form of evidence is the conversation itself. If we're going to practice evidence-driven leadership of course, we've got to look for evidence at all levels. And that includes student work. And I don't want to jump right to data here, I wanna look at the actual work that students are doing. And you might've might've come across books like Matt Renwick's book on portfolios and how we can capture and share student works. That we can actually look at student thinking as crystallized in their writing or maybe the practice problems that they're doing or a project that they're working on. There are lots of different books on protocols for looking at student work but this is something that as a profession, especially at the administrative level, that we often skip entirely.

We do not often enough look at student work as a rich source of evidence. What we instead do is we try to simplify it for ourselves and we tend to look at data. It's much easier to get large numbers of students data into a spreadsheet. It's harder to look at individual work samples. So I think there's been a lot more attention to data in our profession. And we certainly need to look at the patterns that only appear when we do have a spreadsheet, we do have actual numbers that can be sorted and averaged and dis-aggregated and all the different operations that we do with data. So assessments, I would say is kind of the final major category of information that we're looking at, but in a feedback conversation, we need to be open to using all of those sources of evidence, right?

We talk about the research, we talk about the best practices. We need to be able to talk about what we saw in an observation. We need to be able to talk about what was happening and treat the conversation itself as a source of evidence, as a source of insight into what the teacher was thinking. We need to be ready to look at student work and at the patterns, the data in terms of student assessments. And when we don't have the ability to directly get into classrooms.

Think for a moment about what would happen if we were depending only on direct observation? What happens when we're no longer able to do direct observation, right? We can maybe get a video clip. Maybe we can join a zoom class or watch a video that the teacher has prepared, but

what's missing, right? Obviously we can talk about that video or that clip or that online class that we saw but I don't think that's quite enough. I think we need to be ready to pull in other forms of evidence to have rich enough conversations. So I've heard a lot of questions this year from people wondering, how can I kinda join my virtual classes that are happening? Can I join as a participant? Should I do pop in observations in the zoom classes? Should I join, like the students do and just kind of observe that way? And if you wanna do that, I think that's fine, but I don't think it's helpful in terms of completely replacing all of those sources of evidence that we really do need.

Just as it was never really enough to go to a classroom in person, that was not enough as a source of evidence. And it's certainly not enough on video. We need richer sources of information because I believe, and we'll talk about this further in the next section, but I believe that when we do observe, whether that's in person or on video, that what we are seeing is just the tip of the iceberg. We are only seeing what's visible above the surface.

And a lot of what matters most in teacher practice, the thinking, the planning, the assessing, the decision-making is hidden beneath the surface. And we'll talk more about the nature of those aspects of teacher practice and how to get at them in the next section. For now in your journal, answer these two questions. What sources of evidence do teachers rely on when talking with their colleagues, for example, in their PLCs?

So what sources of evidence are teachers already using even apart from feedback conversations that they're having with coaches or administrators, what evidence are they using in their own collegial conversations? And second, what sources of evidence are available to you at the moment? Based on how school is currently operating, knowing that that may change from day to day, what sources of evidence are available to you? Answer those questions in your journal, do some reflection. And when you've done that, you're ready to move on to the next section.

The Iceberg: Visible & Hidden Aspects of Teacher Practice

If we're going to practice evidence-driven instructional leadership, we've gotta understand fundamentally what teacher practice is. And as Charlotte Danielson would say, teaching is cognitive work. If we think about it like an iceberg, an iceberg is about 10% visible above the surface, but fully 90% of an iceberg is hidden beneath the surface. And I wanna suggest to you by way of metaphor, that the same is true of teacher practice.

When it comes to what really matters in teacher practice about 90% of it is hidden beneath the surface. But if we look at the kind of ways of thinking, the kind of metaphors that we normally use when it comes to instructional leadership, we treat teacher practice as if it was much more like an athletic performance, like playing in a baseball game, right? And I think some of this has to do with the fact that historically many administrators have been athletic coaches and have a lot of experience working with students to help them improve their grip on the bat and their swing and their stance, and all of the different mechanics that go into being a baseball player.

We take that same mindset and that same metaphor into our work as instructional leaders. But I think it would be a mistake to cast teaching practice as a direct parallel to athletics, right? And if we kind of divide this into behavior and thinking, most of the feedback that teachers get in our profession focuses on the visible behaviors of their teaching. And if we wanna be evidence-driven, that would appear to make sense, right? If we can... And if we wanna provide feedback on what we actually saw, doesn't that align with an evidence driven philosophy? Yes to some extent.

And there is some value in helping teachers improve those mechanics, those visible behaviors. But I think we have to be careful because too often, what we're really doing is we're second guessing something that's already over and we're missing the bigger opportunity, which is to help teachers sharpen their thinking. So I don't think athletics or baseball or sports is the best metaphor for thinking about teacher practice. I think a closer metaphor is chess. And chess is almost entirely a game of strategy, right? There are no real mechanics, there are no sports medicine experts in chess, right? It's almost entirely a cognitive game. You can play it on a computer. You don't actually even need a chess board. It's entirely a mental and cognitive and intellectual game. And I don't think that's a perfect metaphor either. I don't think teaching is 100% cognitive, but I think it's better. I think it's closer to the reality of teacher practice.

And if we're going to improve teacher practice, we would do better as instructional leaders to think about it in terms of more on the cognitive side, more like chess than baseball. So we do have some aspects that we see. If you observe a chess match, I think this is where the metaphor isn't quite perfect. If you observe a chess match, you really don't know what's going on in the player's head. And we have a slight advantage there in the actual teaching profession, we actually can see some things. We actually can gather firsthand evidence. And that's very useful as an entry point into an evidence-based feedback conversation. It gives us something to talk about and to make sense of, but we have to remember that what we're seeing, if we're observing in a classroom, or if we're looking at artifacts in a virtual instruction context, what we are seeing is just the tip of the

iceberg. It is not where the heart of practice lies and where the opportunity for improvement truly lies.

So let's get into this iceberg metaphor a little bit. I wanna plot this on two different dimensions. And vertically in the diagram here, I have visibility mapped out on the vertical axis. If we see a behavior directly, if we see the teacher giving a signal to get the class's attention or explaining a concept or responding to a disruption, there are those aspects that are directly visible by an observer. And sometimes those same aspects would be equally visible on video. And of course, if we can get into classrooms in person, we might see more nuances, we might see more of what the students are doing and how kind of the room feels if we're there in person. But by their very nature, there are some practices that are more observable than others. And if we think of this in terms of, say the Danielson framework, typically we're looking at domains two and three, when we're in the classroom in person, right? The classroom environment and instruction.

And we're not looking at domains one and four quite so much. We don't have direct evidence of those in the classroom. Things about planning and preparation or things like professional responsibility, those are a little bit harder to gain direct evidence of during an observation. So that would be the submerged portion, the underwater 90% of the iceberg. The second axis, the horizontal axis in my diagram here is what I call zoom. And we can have a tight zoom in the short-term or we can have a longterm zoom. And sometimes we don't quite know how to interpret what we're seeing if we don't have as much perspective on how different aspects of professional practice are playing out over time.

For example, relationships with students are something that I would consider very long-term and very wide zoom. If a teacher has a very good relationship with a student, they can get more out of that student when it comes to their work. They can be a little harder on the student in the moment and yet not damage the relationship if that relationship is already strong. So if we're going to observe an interaction in the classroom, it's very helpful for us to have some perspective on those wide zoom, kind of long-term issues that are relevant to that particular short-term observation.

And if we look at the nature of some, of say domain four around professional responsibilities, communicating with families, participating in a professional community, growing and developing professionally, often the short-term and the long-term conflict with each other, right? If we want to see a perfect lesson with no mistakes in it, well, that might give us a better observation in terms of short zoom visible things in the moment. But if our goal is to help the teacher, let's see, four E, growing and developing professionally. If we want the teacher to try something new, to take a risk, to explore, to build new capacities.

Then in the short term, we have to expect that that is going to look different and it may even look like failure in the short term, but we have to be aware of that 90% of teacher practice that's hidden beneath the surface or plays out over a longer period of time if we're really going to have the impact on teacher practice that we want to. So think about that metaphor of teacher practice like an iceberg and pull out your journal and think about these questions for just a moment. When you observe in a classroom, what aspects of teacher practice are easy for you to observe?

And let's assume that you can get there in person, even if you can't do that right now, when you're observing in a classroom, what's easy to observe? And on the other hand, what aspects of teacher practice are hard to observe? And you may wanna look at the Danielson framework or your teacher evaluation rubric to get a little bit of a menu to choose from in terms of the aspects of practice. And then third, what observable evidence gives you some potential insight into teacher thinking? Now we know that teacher thinking is on the surface invisible, right?

You can't just walk into a classroom and see teacher thinking directly. But what we can see can give us an entry point into teacher thinking if we then have a conversation about what we saw and use that to gain insight into the invisible thinking. So what observable evidence gives you insight into teacher thinking? That's it for this section. When you've done your journal responses, you are ready to move on to the next section.

Observability Bias

Before we can go any further we've got to talk about observability bias. It's one of the most pernicious forces that limits our impact as instructional leaders. So what is observability bias? In the last section, we introduced the metaphor of the iceberg, and talked about how, when we get into a classroom and observe teachers teaching what we can observe, the mechanics that are visible to us is only about 10% of what's really going on in teacher practice.

If we think of teacher practice as being like an iceberg, 90% of what really matters is hidden beneath the surface. And it plays out over different timeframes. Some things that we can observe in just a moment and some things that play out like relationships with students and families over the course of the entire school year. So observability bias is based directly on that challenge, that when we get into a classroom, we don't see everything. We just see the tip of the iceberg. And here is what it is specifically. So observability bias is the tendency of instructional leaders to focus on whatever's easiest for us to observe, right?

Rather than the key decisions that teachers are making. What we're essentially doing with observability bias is we're treating, what's easy for us to observe as if it's what matters most, right. And we're kind of confusing measurability or observability or ease of documentation with substance and impact. And sometimes we need to recognize that what we should be focusing on might actually be fairly hard for us to observe and gather evidence of. Let's look at an example that probably is going to sound a little bit familiar. The visible teaching behavior might be that you see a teacher asking lower level factual recall questions. And you might be thinking about some shared expectations around depth of knowledge or Bloom's Taxonomy. And you might be thinking well, we really want our teachers to be asking higher order questions right? Don't we?

So the visible observable documentable behavior is that the teacher is asking lower-level factual recall questions. The invisible aspect of that is the teacher thinking, right? What's the teacher's purpose for asking questions at this point in the lesson. Where is the class within the unit. And what misconceptions do students currently have? What information is the teacher trying to get? Or what purpose is the teacher trying to serve with this line of questioning? Those issues are invisible to us if all we're doing is popping in to observe. We don't have insight into those questions until we talk with the teacher.

So if we allow our practice of instructional leadership to be unduly influenced by observability bias what we might do is like, say, "Hey, you know what? I observed that you were asking a lot of lower level, lower order kind of basic questions. And I'd really like to see you asking more higher order questions," right? That's a big priority this year. You should be asking higher order questions. And we might give feedback like that. If you have a suggestion that the teacher asks a higher order question but that feedback will miss the mark if the teacher's purpose was better served by asking those lower-level factual questions. Maybe they were reviewing for a quiz.

Maybe there were just trying to get everyone on the same page before they got into a higher order thinking kind of activity. So the whole iceberg instructional leadership practice would be to get into that thinking. That we need insight into to really understand the practice that we observed. Sometimes we need to deliberately give ourselves the opportunity to access teacher thinking by simply asking, you know, "Here's what I observed, tell me about that. Talk to me about that." We need to give ourselves the opportunity to get that invisible teacher thinking into the open so that

we can talk about what really matters, not just the part that we observed.

You've probably heard the old story of the person who lost their keys and they're looking around kind of under a street lamp. And somebody comes along and says, "Hey, you know, did you lose something?" Or, you know, "Can I help you find something?" And the person who's looking says, "Yeah, I lost my keys." And they just continue looking around. And the other person says "Well, where did you last see them? Did you drop him right here? Like, I don't see anything. Did you, did you drop him right here?" And the other person says, "Well, no, I dropped them over there across the street, but the light's a lot better right here. And that idea that we should just look where the light is best not where the keys actually are, I think pervades the practice of instructional leadership.

Too often we look at those surface level teaching behaviors because they're easy for us to observe, not because they're where we really need to be looking. An observability bias can actually manifest itself in the tools that we use. If we use things like simplistic observation checklists, like I want to see this I want to see that. And we just kind of check off, was this element present or not. Or if we have more complicated forms that allow us to score using different rubrics. If those elements that we're looking for are not really at the heart of the cognitive task that teachers are engaged in, when they're teaching then we're going to end up with various distortions. And our feedback conversations are not going to be as impactful as they could if we shown a light on where the key is actually are, where the teacher's decision making is actually focused.

So there are a lot of distortions that come in when we try to use the instructional leadership process for things that it's not as good a fit for. For example, the idea of inter-rater reliability is often one that comes up. And I think it's a issue to think about when you are training administrators, In a administrator prep program I think it could be a good exercise to have everybody watch a clip of the same clip, the same video of a lesson and take notes and come to similar conclusions based on their knowledge of good instruction. I think that's a worthy goal. But I don't think it's helpful in terms of the day-to-day supervision and evaluation and coaching and improvement of teachers and their decision-making. Because what happens is if we treat inter-rater reliability as the goal, we will treat just the tip of the iceberg as the only relevant source of information. See if you're going to get inter-rater reliability, all of your raters have to have access to the same evidence.

But the video clip or the short observation, maybe you bring six people in and have them all sit at the back of the classroom and observe in person, those people who are observing, but not talking with the teacher are not going to have access to the evidence they truly need evidence that only comes from the conversation. So I think we have to be really careful about allowing our work to be distorted by observability bias. We have got to find ways to see the whole iceberg. Keeping in mind that parts of that iceberg may not be, may not be visible to us within a single lesson. If you think about the way your teacher evaluation criteria are written, they're written most likely to evaluate teachers on their overall practice over the course of the year.

They're not, you know, how does the teacher hold the bat? How does the teacher swing the bat? How does the teacher plant their feet, you know, to you know, to get a good hit, right? They're not those kind of in the moment things. They're long-term responsibilities. And if you look at the Danielson framework it's definitely written that way to reflect the fact that teacher evaluation is supposed to reflect practice over the course of the entire year. So if we treat an individual observation or an individual moment in an observation as a snapshot of that overall, kind of a freeze frame

of that overall practice, we're going to get some distortions that make our job a lot harder than it needs to be. And especially if we're trying to achieve inter-rater reliability. And I think there may be cases where we need multiple observers.

If we have someone who is maybe getting a negative evaluation, maybe being placed on probation, I understand there are cases where we want different observers to observe and come to similar conclusions. But for the most part simply observing is not going to give us enough evidence to achieve anything like we might call inter-rater reliability. And if the key elements of practice are not even directly visible without a conversation then we're really off track when it comes to, you know, the nature of the task that we face as instructional leaders. So if observability bias is such a big problem what can we do about it? I believe the antidote to observability bias is to adopt the insider's view of teacher practice.

In other words, we need to be willing to look as deeply and think as deeply about teacher practice as teachers do themselves. And often we don't do that. Often, if we're honest with ourselves, we're focused on what's easy for us. We're focused on what's directly observable. We don't really want the teacher to be able to talk their way out of something that we thought was not okay. We want to allow our judgments to stand even if those judgments are not based on that kind of whole iceberg perspective. And that's not gonna work for us, we really need to see that whole iceberg. So how do we shed light on that whole iceberg? How can we see everything that matters when it comes to teacher practice? We can't directly observe those beneath the surface elements but we can get some insight from teacher talk.

We can get teachers talking about their thinking. If we have two things. If we have, first of all shared evidence. So we do have that tip of the iceberg that we did see or maybe we have some artifacts. We have student work or student assessments, you know we have some evidence that we can talk about. And then we have a conversation using the shared language of an instructional framework, which we'll talk about in subsequent modules of this program.

For now, pull out your journal and reflect on these two questions. When in my career have I been the victim of observability bias, right? This has probably happened to you where an observer came in, didn't have a lot of time. didn't have a lot of context or knowledge of what was going on in your class or what that unit was about or what the standards were, or what your students needed at that moment. And judge what they saw above the surface based on their pre-existing knowledge and their assumptions. Has that ever happened to you? What were some of the consequences of that, and how did that play out? Think about that in your journal, and then ask yourself when have I made the mistake of giving a teacher feedback that was influenced by observability bias? When have I done that myself, when I didn't have the full perspective, I couldn't see the whole iceberg and I gave feedback just on those surface level behaviors that might've been misguided. Think about that. Do some writing in your journal, and I will see you in the next section.

Curator, Docent, and Other New Roles for Teachers

Let's talk now about the various different roles that teachers might be cast into if your school is operating in a virtual or hybrid format at the moment, or will be at some point during this school year. If we think about what teaching is in a virtual context. It's not always the kind of managing a classroom, explaining things from the blackboard kind of teaching that we may have been accustomed to when we were students. And certainly those changes have been a long time incoming.

We've seen things like flipped classrooms and we've had learning management systems and other technologies for a long time now, that make teaching less like the traditional sage on a stage and less like a lecture hall. But especially when teachers are teaching in a full virtual or hybrid format, teachers are cast into a dramatically different role such as curator, docent, coach, teammate. You know, if you're doing project based learning, you might have the teacher working for a lot of the unit as kind of a collaborator or as a guide to students. So it can look quite different.

And I think when we're giving feedback or having feedback conversations with teachers, we've gotta be mindful of the role that they're playing knowing that it may not be person who explains from the front of the room. It may not be kind of a college professor, kind of metaphor or role that the teacher is working within. And the first set of roles that I wanna present to you for your consideration, comes from the museum world, right? If you think about the people who work at museums, you have curators who identify what's going to go on display and maybe they acquire things that are going to be a part of the exhibits. They prepare the exhibits and they basically make decisions about what visitors to the museum are going to experience.

And when it comes to virtual learning, there's no need to reinvent the wheel. There are enough instructional materials out there. There are enough curricular materials, and videos, and demonstrations, and worksheets, and exercises, and activities, and projects. You know, there is enough out there that teachers should not be having to reinvent the wheel on everything from day to day, right? There's plenty out there that teachers can simply curate. And when a teacher has curated something, they have made some of the most consequential decisions that they will make as teachers, right?

Deciding what's going to be done for learning is one of the most critical decisions that teachers make, and it happens before the lesson even begins. So if we think about that whole iceberg of teacher practice or if we think about the Danielson framework, you know, domain one planning and preparation, a lot of that happens through what we might think of as a curator role. Then when students are actively learning, when they're logging in, or participating in a lesson, the teacher's role might not be explainer. It might not be lecturer. It might be something more like a docent who guides students through the activities, who take students around and points out to them the most relevant aspects or the things they might not know, or might need help with. It helps them make sense of the content.

Those roles may be especially critical in virtual or hybrid learning contexts. And I think the metaphor that we use just as we saw that maybe chess is a better metaphor than baseball, or that the iceberg is a good metaphor for thinking about practice as something that's more than meets the eye, that there are deeper aspects. Those curator and docent roles can really round out our understanding of how teachers impact student learning. And if we're going to have conversations with teachers about how to improve their practice, we've got to know what role they're attempting to play in the first place in that portion of a lesson that we're observing.

Another role or metaphor that you might want to consider is the role of coach, right? If students are working on a project or working to get a paper that they're writing up to a certain standard, there may be very little direct instruction. And the teacher's role may be largely one of defining, winning, and getting students excited about winning that game. You know, writing a paper that successfully argues a point. You know, if they're writing an argumentative essay, it may be around capacity building, right? A lot of sports teams practice to build their capacity, right? And to improve their ability to win.

So the work that teachers are doing maybe to help them build their skills in achieving that particular aim, and then to kind of cheer them on, keep them motivated, keep them moving. The coach role is incredibly important when students are working asynchronously, right? Because when we don't have students in front of us, we don't have the ability to kind of control the environment to the same extent. Getting students interested, getting students engaged, and motivated, and moving forward toward that goal, toward that victory is just a huge part of being effective. Sometimes though they're not even playing the coach. Sometimes the teacher is really more of a teammate, right?

Think about... I'm thinking about the videos that my own kids are watching during virtual learning. Some of their teachers are not the ones who are appearing in the video. It's actually other teachers on the team who are playing a role and maybe doing one segment of the lessons or one particular subject. And what they're doing is they're basically dividing the workload, right? We have different divisions of labor going on especially with virtual and hybrid instruction that just makes sense, right? It's just more efficient for one teacher per grade level to film the phonics video or to film the science video, rather than have every teacher make up their own from scratch and kind of reinvent the wheel five times over.

So, divisions of labor are incredibly important. And if we're going to have feedback conversations with teachers, we have to recognize the role that that teacher is playing within their department or team, because we're seeing more specialization, more divide and conquer, and that is going to play a role in our feedback conversations. So think in terms of teamwork, think in terms of curation, and being a docent, and being a coach. This is not a year when we can treat teachers simply as lecturers or as classroom managers, or as explainers.

We've got to think more robustly about all the different roles that teachers are playing. When it comes to feedback, this means that we need to be looking at different sources of evidence and asking different questions. So we will talk about some feedback questions that you can use when teachers are playing a kind of non-traditional role in the next section. For now, go ahead and pull out your journal and think about these two questions.

How are teachers working together in new ways in your school? And what aspects of the division of labor among teachers are going to be relevant for your feedback conversations? And second, how are teachers enacting each of the roles that we talked about in this section? The roles of curator, docent, coach, and teammate. When you've reflected on those questions in your journal, you'll be ready to move on to the next section.

15 Evidence-Based Questions for Feedback on Virtual Teaching

To round out module two, I wanted to share with you 15 questions for evidence-based feedback on teaching. See, this is a year when likely a lot of the teaching that is occurring, is not in a traditional classroom format, it's not lecture or managing a classroom in the traditional ways. Teachers are operating in different roles. They're dividing the work in different ways, and we're using different sources of evidence than we normally would as an entry point into teacher thinking in our feedback conversations.

So what I'm going to share with you now is available as a PDF. We're gonna go through the different types of questions that are available to you in this document. You can go to principalcenter. com/virtual-pdf to download and print a copy. And I recommend that you do that to follow along as we talk about these five sources of evidence, and I've got three questions for you for each source of evidence. So first of all, what are the different sources of evidence that we can be looking at to inform our feedback conversations if we're not always able to observe directly?

First we can look at documents. We can look at the standards. We can talk about the standards and kind of where the teacher's thinking is around the standards or the curriculum. We can look at pacing guides and other kind of documents that create common expectations for what is going to be taught and perhaps when.

Second, we can look at artifacts that are created by the teacher and pulled together and kind of put together for students. And we can also look at artifacts that are curated by the teacher. So perhaps in an attempt to avoid reinventing the wheel, the teacher's using resources found online, or resources created by a teammate, or resources pulled directly from the curriculum in most cases. So a teacher-created artifacts, teacher-curated artifacts.

Fourth we can look at student work and I think this is one of the most valuable things to look at, because it's not only evidence of teacher practice, it's evidence of student learning, and that is the bottom line. So we should be talking about that whenever possible, student work, and we will talk more about some protocols for looking at student work in our bonus module. And then fifth, we can look at data and assessment results.

And throughout each of these categories of question and different types of evidence, we're going to be using a concept that I call the instructional gap what is the instructional gap that we're trying to get students across, with this teaching? So the instructional gap could take a number of different forms. It could be simply knowledge, what knowledge are you trying to get your students to develop, what are you trying to teach them so that they know it, it could be a skill that you are helping them build, perhaps a writing skill or a computational skill.

The gap could be an attitude. It could be a misconception that you're trying to correct. It could be work that's still in progress, right? If you're having students write an argumentative essay, they might go through different drafts. And it's not that there's an error, or a misconception, or a gap in their knowledge, it's just that they're not done revising yet. And that is the final gap that you need to get them across is getting that work into its final form. Or if we're thinking about math, or chemistry, or something where there's computation, the instructional gap maybe around doing

that computation correctly. So we're going to use the general term, instructional gap, to talk about each of those and to focus our attention on what needs to happen instructionally. So if we're starting with a curriculum document, the standards, a pacing guide, some sort of pre-planning document like that, we might ask questions like the following.

Number one, where are you within these standards or curriculum or pacing guide, where are we, and what instructional gaps do you see as most relevant for your students right now? If it's a math lesson, the teacher might choose to talk about a common misconception that the students have with this particular set of concepts.

Number two, what difficulties do students typically have with this content and what may be especially challenging for remote learners? Again, we wanna tap into the teacher's existing knowledge of the content and what students typically struggle with. If they're writing an argumentative essay, what do they typically need help doing well in order to succeed with their essay?

Third, what aspects of student thinking, will be especially difficult to assess and engage with remotely, and how are you thinking about doing so? So these are questions that again, are not feedback on the visible teaching that has already occurred, these are not kind of lesson post-mortem questions, these are largely planning questions. But I don't want you to think just in terms of, that this is like a pre-conference kind of set of questions. This is really getting at the heart of teaching. That domain one in Danielson that planning and preparation and thinking that happened before the learning activities, this really is at the heart of thinking.

And there's a great opportunity there to have an evidence-based conversation, even before no observable instruction has taken place. Let's move on to the second category, which is teacher-created artifacts. First, what instructional gaps did you create this artifact to address and how's it working so far? Have you started using it? What's been the reaction? Second, how did you determine that you needed to create something new, rather than use something that already existed. For example, from the curriculum guide, or from a colleague or from the internet, and third how did students experience it and how did that compare with your expectations? So, we can ask these questions at different points throughout the timeline of developing and using those instructional materials. But we're focusing on something there that the teacher has actually created.

The third category is artifacts that the teacher didn't create personally, but has curated or chosen to use from the curriculum, or some other source. Again, starting with the instructional gap. What gaps did you intend for this artifact to address when you selected it, and how's it working so far? Second, how did you to choose this particular artifact over the alternatives, over something else you could have found online, or over creating something yourself to more specifically meet that need. And obviously there's a trade-off there in terms of time and fit.

You know, we might be able to come up with something that's a better fit, but of course that would take more time and we can't always do that. So talking about that trade off, is often quite valuable. And then third, how's it going? How did students experience it? How did it compare with your expectations? So a lot of similarities between the created and curated artifact questions. Fourth, we can ask some questions about student work artifacts.

So what specific instructional gaps did this assignment aim to address? Second, what evidence does this response, if we're looking at a specific piece of student work, or response from one

particular student, what evidence does this response give you about the student's thinking, and what do you see as their next step for that individual? And third, what do you see as your next step based on this and the other student work samples that you've reviewed? And of course we can always go a level further up in abstraction and look at data, look at the patterns in our assessment results.

What patterns in the data stood out to you as especially relevant, and what did they tell you about student thinking and the remaining instructional gaps? Second, how have student thinking and instructional gaps changed since last time you assessed, maybe you did a pre-test, maybe you did a quiz for practice and for assessment informatively, and now you've done some more teaching, some more learning activities, and you're assessing again. How has that changed? And then third, what instructional gaps remain and how are you thinking about addressing them based on the set of data?

So all of those question types can be adapted to whatever is going on right now, instructionally in your school, whether you're learning virtually, whether there's a hybrid format, maybe students are on campus sometimes but not always, or maybe you have some students who are full-time on campus, and other students who are full-time remote.

We need to be able to look at alternate sources of evidence and use that evidence as an entry point into teacher thinking. Go ahead and pull out your journal. And when you've answered these questions and done these reflections, you'll be finished with module two. Think about a past feedback conversation, in which an artifact-based question would have been more useful than an observation-based question. What aspects of teacher thinking and decision-making could you have zeroed in on? I'm going to guess that in recent memory, you have tried to provide feedback on something that you saw, and then you've realized that what was directly visible to you, was not the most relevant, right?

Observability bias, tends to focus our attention on what's easy for us to see, easy for us to document and notice, and then we can talk about what we actually saw with our own eyes. But as we know from the iceberg metaphor, and from those less observable domains in say, the Danielson framework, a lot of the most important aspects of teacher practice, especially the cognitive aspects, the thinking and decision-making, are not directly observable in the moment. We've gotta look for other forms of evidence. So think in your journal about a past feedback conversation in which you could have looked at artifacts, and that would have given you better insight into teacher practice.

When you've reflected on that and filled out that part of your journal, congratulations, you are done with module two, and I will see you in module three of the virtual instructional leadership challenge. I'm Justin Baeder with the principal center. And I wanna thank you for your investment of time and effort in this program, because I know it is going to make an enormous difference in your ability to change teacher practice through evidence-driven feedback conversations. Thanks so much. And I'll see you in the next module.