

Culturally Responsive Practices Program:

Course Three: Academic Achievement Facilitation Guide



SEPTEMBER 2019

COURSE THREE — FACILITATION GUIDE

This guide is intended to aid facilitators in applying the modules to conduct interactive professional learning communities. This guide contains an overview of the course modules, a facilitator preparation checklist and activities with guiding questions and prompts. This facilitator guide should be adapted to meet the unique needs of educators in your local educational context.

OVERVIEW

This is the last of three courses in the Culturally Responsive Practices Program. The course contains 15 modules:

- Introduction Module: Introduction to Academic Achievement Course
- Module 1: Student Prior Knowledge
- Module 2: Teaching and Family (Community) Interaction
- Module 3: Family Involvement in Classrooms
- Module 4: Culturally Responsive Curriculum Decisions
- Module 5: Culturally Responsive Practices and Math Standards Alignment
- Module 6: Culturally Responsive Mathematics
- Module 7: Finding Culturally Responsive Practices in Math Instruction
- Module 8: Concepts of Culturally Responsive Practices in Science
- Module 9: Understanding Cultural Distance Related to Science
- Module 10: Science Funds of Knowledge
- Module 11: Three Science Concepts
- Module 12: Understanding the Ohio English Language Proficiency Standards
- Module 13: English Language Proficiency Levels
- Module 14: Educator Resources

Participants are encouraged to complete the course in the order listed. All courses are designed around videos and transcripts have been provided for facilitators. Please note that the transcripts are not grammatically correct as they are transcribed from the informal speech of the videos.

Course Summary

This course will introduce educators to the role that culturally responsive practices play in promoting student academic achievement. To promote academic achievement, educators will consider ways to draw on students' cultures and experiences, incorporate family and community into the education process and align course content to standards.

The current Academic Achievement Course focuses on science, mathematics, and English learners. The Ohio Department of Education is considering adding other academic areas in the future. However, many of the principles throughout the current three content areas in this course can be utilized in other content areas.

Course Objectives

In Course Three, participants will be able to:

- Recognize the importance of acquiring student prior knowledge.
- Recognize the importance of engaging families and communities as a part of an educator's culturally responsive practices.
- Recognize the value of family assets to better involve them in the classroom.
- Examine the curriculum and supporting materials to identify opportunities to integrate student culture in the school and classroom.
- Describe the alignment of culturally responsive teaching and national mathematics standards and apply the alignment to a mathematics class.
- Describe the alignment of culturally responsive teaching and science academic achievement (specifically three concepts: funds of science knowledge, naïve ideas and inquiry) and apply the alignment to a science class.
- Describe the alignment of culturally responsive teaching and English Language Proficiency Standards and apply the alignment within the school and classroom.

Course Terms

A variety of terms related to culturally responsive practice will be used throughout the courses (for example, culturally relevant pedagogy, cultural competence, social-political consciousness). The courses are based upon multiple frameworks and theories related to this work that continue to evolve over time.

Course terms can be found in the Glossary located in the Introduction Appendix.

Directions for Accessing Online Courses

The courses are available through two online options:

- Ohio Department of Education Learning Management System; or
- Ohio Leadership Advisory Council online learning (forthcoming).


Accessing an Online LMS Course through the Ohio Department of Education

1. Go to education.ohio.gov and locate the 'Login' at the top of the homepage.
2. Log in to your account.
 - a. Required criteria to access the state's LMS:
 - i. Hold an active, K-12, Ohio license/credential;

- ii. Have or sign up for an OH|ID OHID account.
- 3. From the OH|ID account homepage, select “Learning Management System.”
- 4. On the LMS homepage, select “Course Catalog” to register for new courses/programs.
- 5. From the course catalog, select the applicable courses or programs.
- 6. After reading the course or program transcription, select “Log-in to enroll.”
- 7. To begin the course, select “Launch Course.”
 - a. Once registered, users may access courses they have registered for from the LMS homepage.

Below is a general list of materials and preparation necessary to run the full course. Note that there are individual materials needed for each module, so it is recommended to review each module prior to each session.

MATERIALS AND PREPARATION CHECKLIST FOR COURSE THREE	X
Set up tables for small group activities.	
Place name tents or name tags for each participant.	
Place a copy of agenda for each participant with learning objectives.	
Gather chart paper and markers.	
Place pens at each table.	
Set up a computer with internet connection and a projector to view and broadcast videos.	
Print handouts (SOME ARE LINKED IN THE COURSE AND WILL NEED TO BE DOWNLOADED AND PRINTED)	
ePortfolios/Notebooks,	
IMPLEMENTATION TIME	
Estimated implementation of the full course is about 4.5-5 hours.	



TIP: Test video links and sound well in advance of your session

This course contains fifteen learning modules:

- Introduction Module: Introduction to Academic Achievement Course
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- Module 14: Educator Resources

In course three, participants will be able to:

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- Examine the curriculum and supporting materials to identify opportunities to integrate student culture in the school and classroom
- Describe the alignment of culturally responsive teaching and national mathematics standards and apply the alignment to a mathematics class

- Describe the alignment of culturally responsive teaching and science academic achievement (specifically three concepts: funds of science knowledge, naïve ideas, and inquiry) and apply the alignment to a science class
- Describe the alignment of culturally responsive teaching and English Language Proficiency Standards and apply the alignment within the school and classroom

I am hopeful that this course three continues to encourage you to embrace the importance of having a culturally responsive teaching and leading mindset, thus activating cultural responsiveness teaching and leading in the daily rhythm of the teaching and learning process with students.

2. Course Three – Module One: Student Prior Knowledge

Learning Objectives	
<ul style="list-style-type: none"> • Participants will be able to recognize the importance of acquiring student prior knowledge as evidenced through discussion and reflection. 	
Instructions	Estimated Time
Pre-activity <ul style="list-style-type: none"> • Read the “Getting to Know You” activity. Have participants read the handout and share strategies they use to gain student prior knowledge. Watch video one of Dr. Cynthia Tyson, Ohio State University https://youtu.be/ksm5cDGOzq4	3-5 minutes 1:36
Post-activity <ul style="list-style-type: none"> • Remind participants of the importance of acquiring student prior knowledge throughout the year. • Have participants reflect on the following quotes from this video segment: <ol style="list-style-type: none"> <i>Getting student prior knowledge means that you have to figure out where they are academically, what gaps exist, and how you can fill in those gaps in different ways.</i> <i>It means you figure out how to fill in that gap and help them. Teachers who understand their students' prior knowledge about academics, about the world, about the community, and their knowledge about realistic</i> 	3-5 minutes

goals and aspirations, are the teachers who are able to then help student academic achievement by tying those things together.

Watch video two of Maria Rogers, Maple Heights City Schools

<https://youtu.be/8ICn192NRLI>

Materials: notebook/portfolio, video, "Getting to Know You" handout

Transcript 1:

In this section, we're going to look at academic achievement and the various components of academic achievement, student prior knowledge, teacher-family interaction, assessment, pedagogy, and curriculum design. All of these things make the composite of striving for academic achievement as it relates to culturally relevant teaching. In student prior knowledge, often we think that that means, well, I'm going to find out what the students know. Many teachers are familiar with the KWL charts. What do you know? What is it that you want to learn? Why do you want to know it, you know? They take students through this exercise. And once they get that information, then they say, "Okay, now I will go on and prepare my lesson." But that's not what getting student prior knowledge is totally about. Getting student prior knowledge means that you have to figure out where they are academically, what gaps exist, and how you can fill in those gaps in different ways. What does it mean, for an example, if I'm going to teach a lesson about an airplane, but none of my students have ever been on an airplane? Well, that doesn't mean you throw the lesson on the airplane out. It means you figure out how to fill in that gap and help them. Teachers who understand their students' prior knowledge about academics, about the world, about the community, and their knowledge about realistic goals and aspirations, are the teachers who are able to then help student academic achievement by tying those things together.

Transcript 2: So in my classroom to acquire students' prior knowledge I do a couple things. My number one go-to is pre-assessments. Pre-assessments, we all know as educators, give teachers feedback on what they need to teach the students. So, with my pre-assessments, I really try to make sure that they are focusing on the different depths of knowledge, the DOK ones, twos, threes and fours. My pre-assessments are given throughout a unit. They are given where every three weeks, over two standards, and that allows me to figure out, where do I begin the instruction? How am I going to group them? How am I going to teach them in a small group versus a whole-group lesson? The other two go-tos I use are the anticipatory guide and the if-then statements. So, the anticipatory guide allows me to give the students a couple of statements that could be misconceptions at the beginning of the lessons, and then they would, by themselves, mark true or false, then share with their partner, or within their table groups, their knowledge of the statements. Then, as the lesson goes on, at the end of class, we go back to those statements for them to kind of see were they correct or were they not and how can we fix that? The if-then statements are another way where they are given like a formula or they are given a topic and then they have to say or use the information to solve it. So, they might not get it but at the end of the lesson they should be able to answer it.

3. Course Three – Module Two: Teacher and Family (Community) Interaction

Learning Objectives:

- Participants will be able to examine their own family and community engagement practices as evidenced through discussion and reflection.

Instructions

Estimated Time

Pre-activity

5-7 minutes

- Review the [Guiding Principles for Family and Community Engagement](#) (or review your district or school family and community engagement plan).
- Propose the question: How does family and community engagement relate to academic achievement for students?

Watch video of Dr. Cynthia Tyson, Ohio State University

<https://youtu.be/9AzhkRC-tQ0>

8:04

Post-activity

3-5 minutes

- How do the guiding principles or your family and community engagement plan align to Dr. Tyson's video? Where are you most successful with family (community) interaction? What areas can you identify for improvement?

Materials: video, notebook/journal, *Guiding Principles for Family and Community Engagement* document from link

Transcript:

When we think about engaging families and communities and this is going to mean the caregivers of our children. I don't say parents because many of the children are not with parents, we find, so there are multiple caregivers in the children's lives. So, we want to engage those people as much as we can. I heard a quote once from a parent and she said, "You can't teach my child without me." And she's absolutely right. If a caregiver believes that you are not the best teacher for their child, then that builds a wedge in between. No matter what you teach or how good you may be in the classroom, there is now a wedge.

Teach. Always. I often tell parents you are your child's first teacher, and so one of the things that I did in our very first parent-teacher conferences was I would start off with paper and pencil because, again, this is back in the days of the dinosaurs, but paper and pencil not my computer. And I would say, "Tell me everything you can about how to be a good teacher for your child because you were your child's first teacher, or you have taught this child something." If it's a foster care or a grandparent, and they would look at me and say, "Well, you're the teacher." "Oh, no, you've taught them things. And I want to learn from you because we're partners in this. And what partner doesn't collaborate with another partner to get the job done?" And they still look at me sometimes a little strangely. But you could ask them, "Did you

teach your child how to tie their shoes?” And they say, “Well, yeah.” “How did you do that? Did you teach him a song? Did you show them over and over again? When did they get it?”

And I would help parents say, “Oh, I told them the little bunny rabbit song, and we learned the bunny rabbit ears.” So music and movement is a pedagogical tool that you use to help them learn something new. I'm going to write that down because I want to remember that so that when we're developing and learning new concepts, I'm going to see about introducing music and movement to help them learn a new concept. I had letters from parents, and I've been teaching for a little while, but I still have parents that tell me that that was one of the most moving and memorable moments of their lives. They joined the PTA. They stayed involved after a couple of years. They felt enough confidence to go in and talk to their child's teacher and say, “Well, I'm going to tell you some things about how my child best learns.” You know we call it learning styles, but we're in this together and so building that rapport with parents early on as teachers and collaborators.

Now you may be thinking, “But my parents don't come. I have parent teacher conference dates set up, and they don't come.” Well I had some of those too, but I also figured out how to meet them in other spaces. A parent that I needed to meet with, and I just said, “You know, I asked a child to talk to me about some of the things that you like you and your parents are your caregivers do.” And they said, “Well, we go to church every Sunday.” I said, “OK well, you know I sent a note to the parent might come and visit your church this Sunday.” And I went. You can figure out public spaces where you can meet people maybe you have a coffee hour. I have a new teacher who decided that she was going to have an ice cream social at a local ice cream shop, and she just sent invitations to the children in her classroom to some noted community members and said, “From this time to this time I'll be here; we're going to have ice cream.” Some of the parents that would never show up for the conference showed up for the ice cream. So figuring out ways to do that.

Remember you can't teach their children well without them. You cannot teach them well without.

And so, involving parents and caregivers. Sometimes it's community members. I had some parents that and some communities where they just couldn't come. They're working two jobs, three jobs, trying to make it. So, reach out into the community for grandparents, community centers. Who are the local politicians that serve that particular area? Invite them to come and have conversations with you about what's happening in your classroom. Newsletters are of course a great way, but now we have email. I have a colleague who likes to do a little video clips. I'm not that brave yet, but she'll send news home by just emailing out these little video clips to tell parents what's going on. When you show that you care enough to reach them any way you can and then have an invitation that is real.

I often hear from parents and caregivers, “That teacher really doesn't want me there, or she wouldn't have any event at 2:00 in the afternoon on a Thursday.” But opening up so that you invite them in times that they really can get there find out if their transportation issues and involving them in making the plans for how you maintain communication from that time forward and really mean it. I always say, “Don't offer something that you really can't do.” I had a parent once who told me, “Well, if you call me after work that will be perfect.” “So, what time do you get off work?” “3:00 a.m.” OK. And when I set my alarm and called her at 3:30 in the morning, she said, “You really care about my kid.

I never expected you to do that.” Now, in the back of my mind, I'm thinking, “I'm not going to do it again.” But I did at the one time to show her that I meant business, and I was ready to make that commitment. So with families and communities in which you teach, remember I'm aware that that might not be where you live. There are ways to be engaged.

Often, we as teachers don't live in the communities that we teach in. We live in another community, but you still can become involved. There are community newspapers, there are community blogs, there are often advertisements for different events that happen in the community. And my encouragement to you as a socially politically conscious person is to look for some of those events that you can attend. There are often many activities throughout the community that you can attend, and you'll see people there. Going to the supermarket, the grocery store

in the neighborhood that your students live in. You will run into someone who won't believe that teachers buy food and eat, but you will run into someone like me because I didn't live in the community or part of the time, I would just stop on my way home and pick up a couple of things that I might need.

And I did this on a regular basis. And then I was like, "Oh that teacher is here or I saw the teacher." And then it was like, "Oh, Ms. Tyson is here." Or "I saw the teacher." So they begin to know you. You can have a visible presence in the community that will speak volumes to your commitment and your care about what's happening to the children.

4. Course Three – Module Three: Family Involvement in Classrooms

Learning Objectives:

- Participants will be able to consider how to better involve families in their schools and classrooms as evidenced through discussion and reflection.

Instructions

Estimated Time

Pre-activity

- Have participants share examples of how parents have participated in your school or classroom.

Watch video of Dr. Cynthia Tyson, Ohio State University

<https://youtu.be/y8nPOZhKfFo>

3-5 minutes

3:03

Post-activity

- In small groups, have participants discuss the following questions:
 - What assumptions did Dr. Tyson make when she had a parent cut out bears in the classroom? How can you relate to this example?
 - What can you do to identify the assets a family can bring to the classroom?

5-7 minutes

Materials: notebook/portfolio, video

Transcript:

I can remember a situation where I invited a parent to come into my classroom, and she said, "I'm willing to volunteer. I can be here every Wednesday from the very beginning of the day to the end of the day." So, it was great. She came in at 8:00 AM and was willing to leave at 3:45. So, I had her cut out bears, and I was teaching kindergarten at the time, and she helped clean up and helped give out snacks, and she

was an extra set of hands. And one day, she said to me, "Well, next Wednesday, I'd like to share something with the class, if it's okay. Just a little mini-lesson. Just 30 minutes, maybe. It won't even take that long." And of course I said okay, but my feelings were, oh, okay, and how am I going to get the children back together after who knows what she's going to do? This mother came in and did a 15-minute lesson and demonstration about Bernoulli's principle of flight and talked to the kids about how an airplane stays in the air, and used ping-pong balls, and blow-dryers, and had all the kids understanding how the displacement of air is what lifts the plane and keeps it up. And of course, I sat there in awe. And then afterwards, I said, "Well, what is that you do?" And she said she worked for a place in town that was a governmental aeronautics place, and she had been in the Air Force, and just all of these different experiences that she had. That long story to say that many times, the parent-teacher interaction is impeded because of teachers' lack of expectation on the part of parents to be participating in meaningful ways. From that point forward, she and I planned lessons together so that once a month, she helped them learn all sorts of principles related to flight, and we brought in some mathematics, and we looked at the objectives that I needed to teach. And together, as partners in this educational enterprise, those students left richer because of it. Often times, when we look at students in our urban areas, especially, or places where our students are economically fragile, we don't think the parents have something to bring. We don't think they have something to help with other than the menial tasks that we necessarily don't want to do. And so teacher-student interaction doesn't mean always that I'm calling home to tell you that your child has misbehaved, or even that I'm calling to tell you that they had a great day today. But it may also mean that you need to say, you are my colleague as partners in the educational enterprise. Let's figure out how we can enrich not only your child's experience here, but the other students in the classroom as well. And that's, I think, really an important thing. Because if I think you're inviting me because I have something to contribute, then I may be more likely to return.

5. Course Three – Module Four: Culturally Responsive Curriculum Decisions

Learning Objectives:	
<ul style="list-style-type: none"> Participants will be able to examine the curriculum and supporting materials to identify opportunities to integrate student culture in the school and classroom as evidenced through discussion and reflection. 	
Instructions	Estimated Time
Pre-activity <ul style="list-style-type: none"> Have participants reflect on who is most often represented in the curriculum and materials they use to teach their courses. Watch video of Dr. Cynthia Tyson, Ohio State University https://www.youtube.com/watch?v=VpkUeUNNvmU	3 – 5 minutes 1:46
Post-activity	

<ul style="list-style-type: none"> • Have participants reflect on the curriculum standards in their grades and subjects and answer: Where are there places to include curricular materials and resources that better reflect the student population in your school or classroom? • Have participants discuss Dr. Tyson’s statement: “...all of the students bring a particular self, a particular personhood to the classroom that without attention to it, there will be no academic achievement.” How does this statement reinforce the importance of embracing a culturally responsive teaching and leading mindset? 	<p>15 – 20 minutes</p>
<p>Materials: notebook/portfolio, video, curriculum standards</p>	
<p>Transcript:</p> <p>As one of the other things that has also been a downfall of some conversations about multicultural education is that when you very pedagogical strategies, if I do small groups, if I do large group, lecture, if I have students work in dyads, triads, if I have interaction patterns that are different in a classroom, all of these things are multicultural strategies. All of these are culturally relevant, alternative ways to get at the designing and the putting together of curriculum. Part of it is about the content, what you're teaching. If you're going to teach about Thomas Edison, you can also teach about Lewis Latimer, who was an African American inventor. If you're going to talk about the first heart transplant, that was done at Johns Hopkins Hospital, then you also need to talk about the fact that the stent that was used was created and designed by an African American man who worked in his lab. So, curriculum design in terms of content and inclusion is important. But sometimes, it's about sequence. Sometimes it's about inclusion and exclusion of materials that may be helpful or not. But all of that goes into understanding if I'm going to do culturally relevant teaching. What does the child bring, be it urban, rural, suburban, all of the students bring a particular self, a particular personhood to the classroom that without attention to it, there will be no academic achievement.</p>	

6. Course Three – Module Five: Culturally Responsive Practices and Math Standards Alignment

<p>Learning Objectives:</p> <ul style="list-style-type: none"> • Participants will be able to recognize that culturally responsive practices align with national mathematic standards as evidenced through discussion and reflection. 	
<p>Instructions</p>	<p>Estimated Time</p>
<p>Pre-activity</p> <ul style="list-style-type: none"> • Have participants read the equity statement from National Council of Teachers of Mathematics: https://www.nctm.org/Standards-and-Positions/Position-Statements/Access-and-Equity-in-Mathematics-Education/. • Have participants respond to the following questions: 	<p>5-7 minutes</p>

<ul style="list-style-type: none"> ○ What is required to create, support and sustain a culture of access and equity in the teaching and learning of mathematics? ○ How would you describe an excellent math classroom? ○ In your content area, how is the culture of access and equity in the teaching and learning addressed? ● Take a few moments to discuss your responses in your discussion circle. <p>Watch video of Dr. Celia Anderson, University of Memphis</p> <p>https://youtu.be/lyhzcVbWbt8</p>	1:55
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Materials: notebook/portfolio, video, National Council of Teachers of Mathematics position statement

Transcript:

I'm sure that many of you are familiar with the books that I have on the table in front of me. The first one is the *Principles and Standards for School Mathematics* that was put out by the National Council of Teachers of Mathematics. In it, they provide recommendations for the teaching and learning of math. Specifically, they argue that classrooms that promote academic achievement include certain characteristics. They include communication, connections, reasoning, problem-solving, and representation. The second book was written by Gloria Ladson-Billings. In it, she outlines the characteristics of culturally relevant pedagogy. Specifically, she says that classrooms that focus on academic achievement have five key characteristics. The first one is that the teacher truly believes that all of her students can learn. The second one that the teacher clearly explains and makes explicit to students the expectations for what it means to achieve academically in her classroom. The teacher also knows her students, knows the content, and knows how to make that content clear to her students. The fourth one, the teacher promotes a critical consciousness towards the curriculum. And finally, the teacher encourages academic achievement that is complex and doesn't lend itself to a single, static way of measuring achievement. The question for mathematics teachers is, what does that mean in the mathematics classroom? In the next few minutes, what I'm going to try to do is to take these two frameworks and see how they relate to each other. Specifically, how do these two sets of recommendations tell us what it would look like to teach culturally relevant pedagogy in a mathematics classroom?

7. Course Three – Module Six: Culturally Responsive Mathematics

<p>Learning Objectives:</p> <ul style="list-style-type: none"> ● Participants will be able to recognize that culturally responsive practices align with national mathematic standards as evidenced through discussion and reflection. 	
<p>Instructions</p>	<p>Estimated Time</p>

<p>Pre-activity</p> <ul style="list-style-type: none"> Share with participants that the next five videos highlight the intersection of the Culturally Responsive Practices framework and <i>Principles and Standards for School Mathematics</i> and encourage them to take notes while watching. 	1 minute
<p>Watch video one of Dr. Celia Anderson, University of Memphis</p> <p>https://youtu.be/IMGGPbffdO8</p>	1:21
<p>Watch video two of Dr. Celia Anderson, University of Memphis</p> <p>https://youtu.be/nbmGK4ZO6EI</p>	1:24
<p>Watch video three of Dr. Celia Anderson, University of Memphis</p> <p>https://youtu.be/1YQCFG_zuY</p>	0:42
<p>Watch video four of Dr. Celia Anderson, University of Memphis</p> <p>https://youtu.be/3z-oT2ENW58</p>	1:43
<p>Watch video five of Dr. Celia Anderson, University of Memphis</p> <p>https://youtu.be/l7JLnoZOhGs</p>	1:51
<p>Post-activity</p> <ul style="list-style-type: none"> Have participants share learnings with partners and refine notes as needed from conversations. 	3-5 minutes

Materials: notebook/portfolio, video

Transcript 1:

If you observed a culturally relevant mathematics classroom, what would you see? One of the first things that I think you would see would be a teacher who promotes the use of multiple solution strategies for the same problem. When students are able to use their own strategies, they're more likely to experience success with mathematics, rather than mathematics operating as a sieve that strains out students who don't

reason in a particular way, allowing students to use their own strategies has a better chance that mathematics will be more of a net, capturing as many students as possible and allowing them to be successful. So, for example, if a teacher was teaching algebraic patterns, they could give a pattern that would involve both visual recognition of a pattern and numerical strategies to recognize that same pattern. So, a student could reason holistically and find a solution to that problem. They could also, another student might reason analytically. Both students could be successful in finding a solution to that problem, but they may have two very different strategies for that. By allowing those multiple solution strategies, there's a better chance that all students can be successful in the mathematics classroom.

Transcript 2:

Another thing that I think you would find in a culturally relevant mathematics classroom is communication. And specifically, questioning. A teacher in such a classroom would provide opportunities for her students to develop mathematical reasoning skills and communication strategies. One of the elements of culturally relevant teaching is a critical consciousness towards the curriculum. One way to begin to develop that consciousness involves learning how to ask questions, to critique answers, and to provide reasoning and justification for solutions. So, tasks that allow students to solve problems in different ways provide opportunities for students to share their reasoning, to compare their strategies, and to make connections between strategies. Asking questions such as, why did that work? What would happen if you did this? How does this strategy relate to another student's strategy? Those types of questions develop students' mathematical reasoning skills and also promote communication in the classroom. Those critical thinking skills can then be used by the teacher to build up, to help students learn how to critique the curriculum more broadly, and also to look at how mathematics might be used in the world around them

Transcript 3:

Another intersection between the two frameworks is the importance of knowing your students. That includes not only knowing them personally, so that you are able to make connections to their lives, but also knowing about their strengths and areas of weakness, and knowing how they learn. So, which students learn best using manipulatives? Which students learn best working in groups? Which students may be good at verbalizing their strategies, but not as good at writing those strategies down? All of those considerations are important for learning how your students learn, and how you can build on their strengths to make them experience academic success.

Transcript 4:

A fourth component of the classroom that promotes academic achievement is likely to be connections. The teacher helps the students make connections between the academic content and their own lives. One of the key recommendations of the principles and standards is the importance of helping students apply mathematics in contexts outside of the mathematics classroom, specifically their daily lives. A culturally relevant teacher would help students to connect mathematics to their own lives. However, this involves more than simply giving them problems that are set in a realistic context. Many of these real-world contexts, while they're good problems, they aren't necessarily relevant to students and their own experiences. So, part of developing a culturally relevant mathematics classroom is knowing what contexts would be relevant to students in a way that helps them learn the mathematics? Robert Moses, for example, working with the Algebra Project, used the context of a subway to help students who were living in Boston connect their daily experiences with the mathematics content they were learning. He took that context that students were familiar with and built upon it to help them understand the mathematics content. But the

same context would not have been meaningful to students who were living in Memphis, for example. So, part of learning about your students and helping them make connections is learning the contexts that are going to be relevant to them. Those contexts will help students connect the mathematics and make it more meaningful.

Transcript 5:

The four characteristics that I have outlined so far really focus on the similarities between the principles and standards, and culturally relevant teaching. However, the fifth characteristic of a culturally relevant mathematics classroom goes beyond the recommendations of the principles and standards. Specifically, a teacher in a culturally relevant classroom would also provide mathematics learning experiences that use student culture as the basis for learning, and also help students connect to the social context around them. So, if you imagine a classroom in which students are engaged in problem-solving, communication, making connections, developing reasoning skills, that classroom would be reflective of many of the characteristics in the principles and standards. However, that same classroom would not necessarily reflect a culturally relevant pedagogy unless that teacher created experiences that build cultural competence by building on student culture, and also helped students to develop a critical mathematics literacy. These are ideas that were not commonly talked about in mathematics education, but they cannot be overlooked in the effort to create a culturally relevant classroom that promotes academic success. These are a few of the characteristics of culturally relevant mathematics classrooms that would promote academic achievement. Certainly, there are more components that would go into such a classroom. However, my goal has just been to allow you to start thinking about the characteristics of culturally relevant mathematics classroom that would promote academic achievement for all students.

8. Course Three – Module Seven: Finding Culturally Responsive Practices in Math Instruction

Learning Objectives:

- Participants will be able to identify the characteristics of culturally responsive practices in a mathematics lesson as evidenced through the use of a storyboard activity.

Instructions	Estimated Time
Pre-activity <ul style="list-style-type: none"> • Hand out the <i>Storyboard Activity</i> and go over directions (see <i>Storyboard Activity</i> for directions). Participants should complete the storyboard while watching the video. 	2-3 minutes
Watch video	10:30

<p>https://www.youtube.com/watch?v=X05F-9B10sA&list=PLABB4RiLQUdIOczl4q_sRznCstTtarLro&index=8</p> <p>Post-activity</p> <ul style="list-style-type: none"> • Have participants share what they observed in the video related to the characteristics of culturally responsive practices in the mathematics classroom. • Have participants look at Ohio's Learning Standards for Mathematics and find areas where they feel they can incorporate the Culturally Responsive Practices framework into the grade levels they teach. 	<p>10-15 minutes</p>
<p>Materials: <i>Storyboard Activity</i>, Ms. Toliver video, <i>Ohio's Learning Standards for Mathematics</i></p>	
<p>Transcript: There no transcript for this video, you may choose to use the closed captioning option with the video.</p>	

9. Course Three - Module Eight: Three Concepts of Culturally Responsive Practices in Science

<p>Learning Objectives:</p> <ul style="list-style-type: none"> • Participants will be able to identify three concepts of culturally responsive practices in science as evidenced through discussion and reflection. 	
<p>Instructions</p>	<p>Estimated Time</p>
<p>Facilitator Note: This portion is not to teach specific science content instead Dr. Nehm is providing this example as a naïve idea that he has seen in practice. From a science perspective, consider that when he references “food” he is referencing the source of energy.</p> <p>Pre-activity</p> <ul style="list-style-type: none"> • Have participants use the <i>Science Academic Achievement</i> handout to take notes while watching the science videos. Specific directions can be found on the handout. <p>Watch video one of Dr. Ross Nehm, Stony Brook University https://youtu.be/dQrNCDNr6ks</p> <p>Watch video two of Dr. Ross Nehm, Stony Brook University https://youtu.be/EYCOVhFLce0</p>	<p>1-2 minutes</p> <p>2:52</p> <p>1:35</p>

<p>Watch video three of Dr. Ross Nehm, Stony Brook University https://youtu.be/cFAKRQBz1Lw</p>	<p>2:01</p>
<p>Watch video four of Dr. Ross Nehm, Stony Brook University https://youtu.be/N_dU9Ee8AZ4</p>	<p>3:05</p>
<p>Post-activity 1</p> <ul style="list-style-type: none"> • Discuss the following with participants: <ul style="list-style-type: none"> ○ Dr. Nehm discusses the concept of “naïve ideas” in the videos, this term is interchangeable with “misconceptions” and both are found throughout the science standards. ○ Read aloud the following (from page 9 of Ohio’s New Learning Standards: Science Standards) <ul style="list-style-type: none"> • Common Misconceptions: This section identifies misconceptions that students often have about the particular Content Statement. When available, links to resources are provided that describe the misconception and that offer suggestions for helping students overcome them. • Have participants review the Ohio’s New Learning Standards: Science Standards for misconceptions by their grade level (regardless of the content area they teach). 	<p>5-7 minutes</p>
<p>Post-activity 2</p> <ul style="list-style-type: none"> • Have participants read the following quote from "Misconceptions and Naïve Ideas of Children" from the Association for Science Education: <p style="margin-left: 20px;">"If we want pupils to understand and use scientific ideas their existing beliefs need to be challenged or extended. We cannot always replace their naive ideas, but we can encourage pupils to use the scientific ones when appropriate, and to show them the inconsistencies in many of their existing ideas...Elicitation questions are used in schools to probe children’s understanding."</p> <p>Elicitation Questions: Elicitation questions are used to draw out students’ existing knowledge related to an academic subject. Culturally relevant teachers utilize student prior knowledge, identified in part through elicitation questions, to more effectively educate all students.</p> 	<p>5 – 7 minutes</p>

- Read the following topics and misconceptions to your participants and have them create a list of elicitation questions they can use in their classrooms in order to identify and unpack their students' naïve ideas (misconceptions):
 - Topic: seasons
 - Misconception: Earth is closer to the sun during the summer and farther away during the winter.

 - Topic: square numbers
 - Misconceptions: a square number is the same as multiplying a number by 2.
- Have participants discuss the following:
 - How do the principles of naïve ideas apply within the classes you teach?

Materials: notebook/portfolio, video, *Science Academic Achievement* handout

Transcript 1:

I'm Ross Nehm, an associate professor here at Ohio State University. I focus on the student and teacher learning of science. I'm introducing the CD on culturally relevant pedagogy in science achievement. The CD is going to cover many aspects of science achievement and how it intersects with culturally relevant pedagogy. In particular, we're going to be focusing on three core ideas: funds of knowledge, inquiry, and naïve ideas. We hope to show you how these concepts can be used to increase student interest and achievement in science.

We're going to have a conversation with Dr. Nehm today, and we're going to be talking about the three concepts that are important in science education as it relates to culturally relevant pedagogy. The first of these concepts is funds of science knowledge, the second is naïve ideas, and the third is inquiry. So, Dr. Nehm is going to talk with us today about what funds of science knowledge is and what teachers can do with it.

Well, we can think about funds of science knowledge in the same way we think about a bank account. Students have a lot of knowledge that teachers often don't recognize is there. For example, just because students are not learning in school does not mean that they're not learning. In everyday experiences, students, whether they're talking with friends, watching TV, seeing a movie, playing sports, they're thinking about the natural world, whether they know it or not. And they're forming ideas about the world. And so, all of these things that happen outside of school can be included in this concept, called funds of knowledge. It's all the things that a student has within their minds, based on their experiences. And so, it can be remarkably diverse. It could include something like argumentation patterns. How does someone debate with a friend whether something is true or not? That could be considered a fund of knowledge, because in science, scientists also have debates about what is truthful and what is not. But, it could be that the funds of knowledge that a student has, the argumentation strategies could be very different from the ways scientists have arguments and debates. So, in some cases, the funds of knowledge can conflict with what's being taught in the classroom. In other cases, a teacher could make use of these funds of knowledge to help build and connect the classroom experience with the student's everyday experience. So, funds of knowledge can include facts; they can include causal ideas. They could include social practices, like argumentation, debating. So, it's a very diverse amalgamation of things that can be included in a fund of science knowledge.

Transcript 2:

Now, with students coming with the funds of knowledge, what happens if some of those ideas or those fact that they know are not scientifically accurate?

It's very often the case. A common idea, a common naive idea that students have from just experiencing the world is that plants, for example, get their food from the soil. It's a very common idea, and it makes a lot of sense. We see plants growing in soil. Children, even in school, sometimes grow seedlings, and see them get larger, and they see that they're in soil. And they assume that's where the food is coming from. Plus, we have things called plant food that they may actually put on the plants. But, of course, plants don't get their energy from the soil; they do so from capturing energy from the sun and converting different chemicals in the atmosphere like carbon dioxide into sugars that we can eat. So, for example, if we have, in summer, a nice corn on the cob, it's very sweet. That sugar was made using the energy from the sun and carbon dioxide from the air. So, some funds of knowledge may have produced ideas that are discordant with the way scientists think. And that's the challenge and the importance of funds of knowledge. They can both hinder or help science achievement. But if teachers do not specifically think about funds of knowledge, they may not be able to be successful teachers. That's why funds of knowledge are very important elements of being a good science teacher.

Transcript 3:

How do teachers, when they tap into these funds of knowledge, and they find that their students have these naive ideas, what can they do about that?

That's a great question. Oftentimes the best way to deal with naive ideas is to make parallels between the history of science and students' current thinking. For example, let's go back to the idea that plants get their food from the soil. Well, some of the most brilliant scientists in history have had the same ideas as students have. For examples, many scientists thought, for hundreds of years, that plants get their food from the soil. So, making parallels between history makes students realize that their idea, while it may not be scientifically accurate today, some of the most brilliant minds through history also had the same idea. So that's a starting point, is recognizing that just because the idea is not consonant with current scientific thinking, students shouldn't necessarily be made to feel bad because of that. But one of your main questions is, how can teachers then deal with this? Let's say that they get them to recognize that the naive idea is an idea that was present in the history of science, but it's no longer considered accurate today. One of the best ways of targeting those ideas is to present evidence to the students that the particular phenomena cannot be successfully explained. Let's go back to the plant example. Growing some hydroponic plants that don't live in soil and showing that they grow and get larger raises the question, well, if they're not getting the food from the soil, where is it coming from, because there is no soil. So, providing experiences that contradict, challenge, or provoke some thought about their ideas is a great way of dealing with these naive ideas that students can often have.

Transcript 4:

Okay. Well, what can students do with these questions that are generated as they begin to question their naive ideas? What is that process called, and what can teachers do to facilitate the learning of the accurate scientific concepts?

Well, one of the best ways is to have students engage in the questions themselves. That is, have interesting scenarios that cause students to have questions, and want to pursue scientific investigations on their own. That's called inquiry. So, inquiry is a way where it's actually the natural process of all the sciences. Scientists every day ask questions, questions they're passionate about, they're excited about, and interested in. All children do have questions that they're interested in, but they're often not given the opportunity to investigate those issues in the science classroom. And so, a very difficult but important aspect of being a science teacher is finding those questions that students are excited about, and having them try to figure out a way of answering that question. Not telling them how to answer it, but having them struggle, just like scientists do every day, trying to answer these questions, coming up with methodologies, coming up with hypotheses, coming up with models of possible explanations. And testing these different ideas to see which one is correct. But having the students driving the questions and the project is what true science, authentic science, or what we call inquiry science is all about.

Okay, so in light of what you just said, then, inquiry is well-aligned with culturally relevant pedagogy, because it's all about tapping into what students know, their culture, their funds of science knowledge, so that not only you can find out what their naive ideas are, but also to find out what they're interested in, what they already know, and then allowing them to engage in the process of inquiry, to answer those questions, and to learn the content.

Exactly. And some investigations can also make use of things that we may not typically think of as a fund of knowledge, like an argumentation procedure. Let's say that two students in class are debating about how plants really get their energy. There may be different cultural aspects. It could be relationships with parents at home. And so it's very important for a teacher to understand how students can have different personal perspectives on how knowledge is decided. It's not always authoritarian. It could also be democratic. So, explicitly talking about the ways we negotiate understanding is a great way of thinking about culture and student background, and how it can relate to the process of inquiry. That is, the process of debate, deliberation, and finding out knowledge. So, there's many aspects to inquiry, funds of knowledge, and naive ideas that aren't just knowledge as we typically think of, but can also be other strategies.

10. Course Three - Module Nine: Understanding Cultural Distance Related to Science

Learning Objectives:

- Participants will be able to recognize cultural distance between themselves and their students as evidenced through discussion and reflection.

Instructions

Estimated Time

Watch video of Dr. Ross Nehm, Stony Brook University

3:51

<https://youtu.be/ESxdxBJpnYk>

Post-activity

5-7 minutes

- Have participants complete the self-reflection activity: Think about some of the students who you might have a difficult time connecting with (no need to share who they are). Answer the following questions either on your own or in a small group.
 - How is your culture different from the student's?
 - How do you think the student views you in terms of your cultural differences?
 - What assumptions might the student make about your intentions/motives based on his or her perception of your cultural differences?
 - Where has there been an instance in which you have not recognized the funds of knowledge students brought into your classroom?

Materials: notebook/portfolio, video, *Science Academic Achievement* handout

Transcript:

Today, we're having a conversation with Dr. Nehm about self-awareness and the use of culturally relevant pedagogy in the teaching and learning of science. So, Dr. Nehm, science teachers often come from very different social, cultural, geographic, and socio-economic backgrounds than their students. Why is it important for teachers to be aware of these differences?

I think one of the most important reasons is that if teachers are not self-aware of their own background knowledge, their culture, and their worldviews, they may not recognize that their students may not have those same perspectives that they do. And so their teaching can come across as very alienating, or distant, and the classroom can seem like a place that's very far away from the students' real lives and experiences. And so, if teachers can become more aware of what they bring to the classrooms in terms of their worldviews, backgrounds, background knowledge, and perspectives, they can begin to see the distances that may exist between them and their students, so they can consciously and explicitly begin to bring those two worlds together. And without that recognition, it's hard to know how close one is to a student in terms of the worldviews.

Okay, and how might that distance influence achievement in the science classroom?

Well, as I was mentioning, the alienation that can often happen in classrooms is a product of students feeling that their teacher is from almost like another planet, another place that has nothing to do with their lives. And it can make students disengage from the material, because they begin to think, what does this material have to do with me or my life? It seems as though the teacher's talking about a world that's very far away from my own experiences, my own interests, my own background, perhaps that of my family. And so, bringing those two worlds

together can definitely impact achievement because it reduces alienation and increases engagement and the sense of relevancy of the material that's being covered.

So, what is it that teachers can do to decrease that distance?

Well, one of the most important things is recognizing that students don't simply have deficits. That is, just because a teacher thinks that a student doesn't have the knowledge that they have, it does not mean that the student does not have knowledge that the teacher may not even know about. Maybe an example might help make this clear. For example, after working in New York City for many years with the Dominican American students, many teachers would tell me that their students don't know anything about science, and that they were really surprised that, gosh, how can I begin to teach students who don't know anything? But then I had the teachers begin to look at the funds of knowledge that the students may have that the teacher wouldn't know about. For example, many of the students came from, or have visited their relatives in a tropical climate, which is very different from New York City. Many of the animals, the plants, the ecosystems, the weather, the climate, were completely unknown to the teacher teaching that science class. But when she began to realize that the students had rich funds of science knowledge, suddenly she could make use of that knowledge to increase engagement, interest, and make the students feel that their own experiences were valuable in the science classroom, which gets back to this whole issue of alienation. And many students feel that science is very distant from their daily lives. So, by the teacher engaging with the student's background knowledge, she was really using funds of knowledge to decrease the distance between them.

11. Course Three - Module Ten: Science Funds of Knowledge

Learning Objectives:

- Participants will be able to identify ways to elicit funds of knowledge from their students as evidenced through discussion and reflection.

Instructions

Estimated Time

Watch video of Dr. Ross Nehm, Stony Brook University

<https://youtu.be/7hKlvTLpEBM>

1:39

Post-activity

3-5 minutes

- Have participants answer the following questions:
 - How can you elicit funds of knowledge from students in your school and classroom?
 - Participants can explore options for eliciting funds of knowledge at this website: <http://www.k12.wa.us/MigrantBilingual/HomeVisitsToolkit/FundsofKnowledge.aspx>
 - Does your science instruction align to what was described in the video?

Materials: notebook/portfolio, video, *Science Academic Achievement* handout

Transcript:

So what are some things that teachers can do to elicit the funds of knowledge that students bring to the classroom?

One of the best ways is talking with students, having them explain some of their own experiences. And that's an important part of inquiry-based science, where students are investigating questions that are of interest to them, where their ideas drive what is happening in the classroom. So, eliciting knowledge from students, having them talk about their experiences, and collectively, as a class, there's often incredible diversity that can be mined and brought forth if the teacher knows how to engage students with that background knowledge. So, lots of interaction with students is necessary. And that's very different from a traditional science class, where the teacher is giving knowledge. An inquiry class, what you will see is teachers constantly eliciting and bringing forth the knowledge from their students. Like, we talk about these funds of knowledge begin to be brought into questions of science that relate to the standards.

Okay, so would it be safe to say that if a teacher is truly engaging their students in inquiry, then by default, they are using culturally relevant strategies?

Absolutely. Absolutely.

All right. So, what we get from this is that self-awareness is about teachers understanding and acknowledging their funds of knowledge, where they come from, their background. It's also about teachers recognizing and using the funds of knowledge that students bring to the classroom to make the content comprehensible.

Mm-hmm. Yes.

Thank you very much, Dr. Nehm.

Thank you.

12. Course Three - Module Eleven: Three Science Concepts

Learning Objectives:

- Participants will be able to identify the three concepts in science using an example and then apply that learning to their own teaching as evidenced through discussion and reflection.

Instructions

Estimated Time

Pre-activity

- Participants will use the *Science Academic Achievement* handout to finalize their notes.

1 minute

Watch video of Dr. Ross Nehm, Stony Brook University

<https://youtu.be/-Qj0-7LEuts>

3:20

Post-Activity

- Have participants reflect on lessons they have taught or plan to teach in the future and outline how they can address all three principles Dr. Nehm has shared: funds of science knowledge, naïve ideas and inquiry.

3-5 minutes

Materials: notebook/portfolio, video, *Science Academic Achievement* handout

Transcript:

For many years, I've been working with Dominican American students in New York City. Dominican Americans as a group have very low levels of science achievement on statewide tests. And after working with many of the teachers in New York, one of the common responses I get from them is that my students don't know anything: "How can I teach them science? I have nothing to work with. They know so much less than other students." The reason why this is very important, because it relates to many of the ideas we've been talking about on this CD. It relates to funds of science knowledge. Why did the teachers think that the students don't have any science knowledge, or less science knowledge than other students? Secondly, are the teachers actually engaging in inquiry-based science, where students get to ask questions and investigate issues that they're passionate and interested in? And lastly, are the teachers engaging and dealing with students' naïve about the natural world, or are they not even trying to tackle students' background knowledge? Well, one of the approaches we used to try to improve achievement was to engage in culturally relevant pedagogy. The first thing teachers did is they began to explore the students' background knowledge. It was very surprising to see all of the teachers completely change their views and say, "Wow, these students actually know a lot of science! It's just stuff that I don't know anything about because they had come from very different places, geographic

locations, from the Caribbean and New York. They'd come in many cases from different socio-cultural backgrounds, and so had different social experiences.” And so when the teachers began to look at the students, they were very surprised at all the things they knew about, but they didn't have any knowledge in common. So, this cultural distance between the teachers and the students was very, very large. Once the teachers began to look at the students' knowledge, and realized they knew a lot about living things, weather, climate, rocks, geology, earthquakes, relating to the Dominican Republic, the teachers began to use those funds of knowledge as examples of core science topics that were covered on statewide tests. Additionally, the teachers could then use and design inquiry-based labs that focused on students' knowledge and interests, making science less alien, less different from their daily lives. And so, by using these three aspects of culturally relevant pedagogy that we've emphasized in this CD, the teachers were very successful in increasing not only students' interest, decreasing the alienation of the science classroom, but also increasing the achievement levels on statewide tests. So, culturally relevant pedagogy can be used successfully, but we have to value students' funds of knowledge, engage in inquiry science, and tackle students' naive ideas, while also respecting the worldviews that students come from. We cannot assume, like many of the teachers did, that the students didn't have any science knowledge.

13. Course Three - Module Twelve: Understanding the Ohio English Language Proficiency Standards

Learning Objectives:

- Participants will be able to explain ways to improve the quality of their instruction using the English Language Proficiency Standards as evidenced through discussion and reflection.

Instructions

Estimated Time

Facilitators, please note to participants that resources will use the term English language learners but the term has changed to English learners per federal and state law. Facilitators are strongly encouraged to collaborate with the English Learner specialists in their district for modules 12 & 13.

Pre-activity Part 1:

- Have participants review the [Our Students](#) document and discuss the following related to “Change in Size of Selected Students Groups 2008-2018 & Diverse Learners”, specifically focusing on English learners:
- Have participants reflect on how the data compares to their districts' profiles related to English learners. (If participants are unaware of their district's data – consider how the data can be obtained to share with the group.) Consider the following:
 - What do you find surprising about these numbers and do you see similar trends in your classroom and/or community?

5-7 minutes

- What do these numbers tell you about the importance of implementing culturally responsive practices in your classroom?
- What are the implications of these shifts for your classroom or building?

Pre-activity Part 2:

- Have participants discuss how they can become more familiar with English learner students in their classrooms. Discuss the following culturally responsive practices for getting to know the English learners in your classroom and ask each participant to select strategies to implement in their classroom:
 - Learn to pronounce ELs names correctly. Don't give nicknames unless the student asks you to use one.
 - Learn a few words of each ELs native language.
 - Read up about the students' culture. <https://www.everyculture.com>
 - Find out about each student's educational background – a growing number of our ELs have interrupted or limited formal education. Knowing this helps content area teachers understand the student's needs
 - Find out about the students' background – immigrant, refugee, asylee, how long in the US, family situation.

3-5 minutes

Watch video of Dr. Kristin Bourdage, Otterbein University

https://youtu.be/4fDQ-nErQ_M

4:37

Post-Activity

- The 10 English Language Proficiency Standards are designed for collaborative use by English as a second language (ESL)/English language development (ELD) and content area teachers in both English language development and content area instruction. These Standards focus on an English Learners participation in the classroom related to the following domain areas: Reading, Writing, Speaking and Listening. Have participants review the 10 English Language Proficiency Standards: https://elpa21.org/wp-content/uploads/2019/03/ELPA21-Organization_of_Standards-5.22.15.pdf.

5-7 minutes

Materials: notebook/portfolio, video, *Our Students* link, *10 English Language Proficiency Standards*

Transcript:

In developing culturally responsive teaching practices for English language learners, I think it's also really important to get professional development in the ideas of pedagogy for English language learners, so one step in this process is to advocate, if you currently don't have options where are you in your school or your ESCs for getting professional development in teaching English language learners, this would be something to advocate for to to make that step toward culturally responsive teaching. for those who are linguistically diverse or who are

English working with English language learners. So, there is an approach to teaching referred to as “sheltered instruction.” Sometimes it’s referred to as “structured immersion.” So, the idea is the teacher unless he or she is bilingual is unable to really speak the language of all their learners home languages and the different languages. So the idea is to within your teaching of your content modify your instruction and use some high quality interventions for language learners. And there are some very specific ways of modifying curriculum for English language learners. There are some very specific high-quality interventions that will support not only the English language development which is what we want to expedite because it takes English language learners several years before they can really gain a foothold in academic English and what that means to really engage in academic work. So we need to expedite that process through high quality practice for English language learners. So using sheltered instruction is one method and learning it is invaluable. For me when I’m working with teachers it’s like a little goes a long way for English language learners, and they will grow in their English and grow in the content that you’re teaching. If you’re not familiar with the English language proficiency standards that Ohio has adopted for English language learners, I recommend that you also start there. So do a search you can find them on ODE’s website.

And you’re looking for ELP--English language proficiency--standards. And what’s so great about these standards is they they they take your content, they show you your standards, and then they should they should the standard show you what each concept and outcome and learning outcome looks like for a beginner, a learner who’s an intermediate language learner, and a learner who’s an advanced really and more I’m just giving you the snapshot but it really does show you what learning looks like the outcome for you in your assessments for English language learners because their language proficiency is going to be variable. You’re going to be working with English language learners who are very new to English. Therefore when you’re teaching a certain kind of content the outcome and their output is going to look very different than someone who’s been learning English several several years. So what the standards do is they they give you at least a sense of what the variations are for that newcomer that beginner to English all the way up to that advanced level. The advanced level English language learner really is, in your class, you don’t really notice that there are English Language Learners. They’re most like native English speakers. Where we see though the need for support is in the area of reading and writing. So those academic literacy skills will lag. Speaking and listening skills, and that’s normal that’s for any any language learner, any language; it’s just the principles of English or language acquisition rather. That will be another area to build in your in your knowledge base through through reading, through professional development, and maybe working with colleagues, maybe getting a book club going around understanding English language learners, language acquisition, can give you some some sensitivity that really culturally responsive teachers have. They have this sensitivity to language that again informs their decision, informs their practice.

14. Course Three - Module Thirteen: English Language Proficiency Levels

Learning Objectives:

- Participants will be able to interpret varying levels of English language proficiency as evidenced through discussion and reflection.

Instructions

Estimated Time

Pre-activity 1:

Provide the following information to participants (*Module Thirteen: English Language Proficiency Levels Handout* found in Course 3 Appendix): Ohio is a member of the English Language Proficiency Assessment for the 21st Century (ELPA21) consortium which developed the English language proficiency assessment based on the English Language Proficiency Standards. The test administered in Ohio is the Ohio English Language Proficiency Assessment (OELPA) and is based on the Ohio English Language Proficiency Standards. The OELPA scores can be used as a general guide to understand an English learner's (EL) proficiency level at the time of testing and provides both an overall score and scores for each domain area.

10-15
minutes

A student will receive a numeric performance level for each of the four domain tests (Reading, Writing, Speaking & Listening) taken.

Level 1 – Beginning Level

Level 2 – Early Intermediate Level

Level 3 – Intermediate Level

Level 4 – Early Advanced Level

Level 5 – Advanced

Have participants review a sample Individual Student Report (ISR), paying close attention to the “Student Performance on Each Domain” section found on page 15 of the document, Understanding OELPA Reports 2017-2018:

<http://education.ohio.gov/getattachment/Topics/Testing/Ohio-English-Language-Proficiency-Assessment-OELPA/2018UnderstandingOELPAReports8-13-18.pdf.aspx?lang=en-US> . *Please note that students may score at different proficiency levels for different domain areas (see sample ISR) and this information is important to remember when working with individual students.

Have participants consider how this information can be obtained in their district for students in their classes.

Have participants consider how this information can be obtained in their district for students in their classes.

Pre-activity 2:

Have participants review the Achievement Level Descriptors (ALD's) found on page 16 of the Understanding OELPA reports document (from Pre-activity 1). “Achievement level descriptors (ALDs) describe the knowledge, skills, and processes that students demonstrate at pre-determined levels of achievement for each tested grade level.” (definition adapted from:

<https://www.k12.wa.us/student-success/assessments/state-testing-overview/scores-and-reports/achievement-level-descriptors>)

- Ask participants to find the ALD that is appropriate to their grade level.
- Ask participants to read the ALD's for Listening, Reading, Speaking and Writing for their appropriate grade level.
- Have participants discuss how knowing these levels can be used within their classroom.

Watch video of Dr. Kristin Bourdage, Otterbein University

<https://youtu.be/kSqZUwu2vuw>

3:18

Post-Activity

Now that participants have reviewed the ELP Standards based on English learner’s participation (from module 12), related to the four domains and have had the chance to review proficiency levels based upon domain area and grade level, the following document, Instructional Guidelines and Resources for English Language Learners, provides examples of how content-based participation goals can be set for English learners at different proficiency levels for each grade level.

15-20 minutes

- Link to Instructional Guide (open to page 17): <http://education.ohio.gov/getattachment/Topics/Other-Resources/Limited-English-Proficiency/ELL-Guidelines/Ohio-English-Language-Proficiency-ELP-Standards/Instructional-Guide-and-Resources-for-English-Language-Learners-Dec-2015-FIN.pdf.aspx>
- The charts (p.17) found in the Instructional Guide document are organized in the following format (Refer participants to *Module Thirteen: English Language Proficiency Levels Handout*):
 - One of the ten ELP Standards
 - Performance targets for each of the five proficiency levels based on the indicated ELP Standard (a complete list of standards by grade, domain and proficiency level can be found in the Ohio English Language Proficiency Standards: <http://education.ohio.gov/getattachment/Topics/Other-Resources/Limited-English-Proficiency/ELL-Guidelines/Ohio-English-Language-Proficiency-ELP-Standards/ELP-Content-Standards-20150824.pdf.aspx>)
 - A vignette (short description of a content-based lesson or activity). The model curricula developed for Ohio’s Learning Standards serve as the source for the vignette. For each grade level, there are at least two vignettes representing each of these four content areas: English Language Arts, Mathematics, Social Studies and Science. ****Vignettes are based upon model curriculum, which has been revised and therefore, the links to the specific lesson will not work. You are encouraged to refer to the vignette context (lesson overview) and match it to a similar context (lesson) in your setting.**
 - Based on the indicated ELP Standard, and using the vignette as a context, participation goals for each of the five proficiency levels have been developed.
 - For each vignette samples of instructional strategies and supports are provided for each of the five proficiency levels.
- Ask participants to locate and review the chart that is applicable to their grade level and content area. (Charts begin on page 17 of the Instructional Guide document.)
 - Ask participants to reflect on the following questions:

- How does the knowledge of the information available in these resources support you as a culturally responsive educator?
- As a culturally responsive educator, what are your next steps?
- How do you plan for incorporating this information into your classroom?

Materials: notebook/portfolio, video, *Module Thirteen: English Language Proficiency Levels Handout*, *Ohio English Language Proficiency Assessments: Understanding Results Manual* link, *Instructional Guidelines and Resources for English Language Learners* link, *English Language Proficiency Standards* link

Transcript:

So when you're culturally responsive teacher of English Language Learners you're also thinking about language proficiency level and thinking about how you might allow for options in how students show their learning and really allow those English language learners to express their learning in a range of ways. And that's really tied to this idea that there are levels of English language acquisition. So the new comer is going to be able to express their thinking and learning with pointing, circling a picture, making a mark next to something that that maybe represents a concept that you're teaching, looking for an example on a page and marking it, and so somebody who's very new to English can provide output to show learning in that way, and the intermediate let English language learner who has been learning in English and using English for a few years it varies, there are a lot of factors that inform this process of acquiring English, but for the most part you know, and that's something you want to ask a culturally responsive teacher of English language learners is going to ask questions about their language acquisition. How long have you been learning in English? Tell me when you started school here. Those are key questions for you because you start getting a sense of, and you will over time working with with the student or the child, but you can get a very sort of a rough idea of you know kind of what language proficiency level they're at. And so the intermediate English language learner who's been learning English for a few years for the most part will be able to communicate like their native English language peers so they will be able to write, they will be able to convey ideas in speaking and writing, and taking in information through reading; what they'll need those modifications in and again how they express themselves so the expectations for your students might be you know complete sentences are something that you know they have to express three ideas in complete sentences and just giving an allowance to that English language learner to express their thinking and learning in maybe a way that's not like native English speakers is really important to consider, and the English language proficiency standards will help you.

There are a lot of examples in the standards of what again the expression looks like for a learner to show to show their learning and show their thinking to you as the teacher. So those will help you be a guide and then if your school does have an ESL teacher the ESL teacher can also weigh in and make suggestions on how you might modify the way in which students show their learning. And if your school doesn't have an ESL teacher then just knowing that there's variability in in what happens at different language proficiency levels in terms of how learners communicate is just a good first step and just allowing for that variation is a really important step.

15. Course Three - Module Fourteen: Educator Resources

Learning Objectives:

- Participants will be able to locate resources to support high-quality English learner instruction as evidenced through utilizing the *Resources* handout.

Instructions

Estimated Time

Watch video of Dr. Kristin Bourdage, Otterbein University

<https://youtu.be/A1gGARxnCIU>

7:23

Post-Activity

10 minutes

- Have participants review the *Resources* handout, explore at least two resources and share what they learned.

Materials: notebook/portfolio, video, *Resources* handout

Transcript:

Okay so there are many resources for you as a culturally responsive teacher for teaching English language learners.

A lot of them are Web based now, online, free, accessible, and really high quality. So, I'm going to share a few that I, and I'll explain you know why I think they're good to get you started and making that step toward reaching English language learners and building your practice around culturally responsive teaching. So, my favorite website when I use my own classes with teachers and I recommend to teachers is the "Color in Colorado" website and this website is amazing. It is a just a clearinghouse of of everything a teacher would need for teaching English language learners. It's really high quality and that there are a range in kinds of materials both for planning and strategies and ideas for working with English language learners as well as good quality research, links to articles, links to books, blogs, really good videos that demonstrate certain kinds of practices that work for those who are linguistically diverse. And it's just it's just a really good Web site so I recommend starting there especially if you don't have resources at your school district or in your communities for working with this population of learners. It would be a good on your own type of site to visit. The other site that I like and that I use a lot as the Iris Web site at Vanderbilt University. And so, I'm hoping to give you enough information where you can find these on your own. But Vanderbilt has constructed online learning modules for anyone. They're free, downloadable, accessible. There's one for English language learners and teaching English language learners that's excellent. And it really helps teachers understand the language proficiency idea and what needs to happen in the curriculum and with adjustments to the curriculum to account for varied language proficiency levels. Again, that's the idea for a newcomer you know learning looks like this in English, if you're working with somebody who's in intermediate or an advanced you know learning will look like this. And so, the module there, if you find it, should be readily found, easily found, is really helpful when you're in becoming maybe a teacher of English language learners if you're newer to this topic. It's a good a good resource. The other one that I like to use in the curriculum. So, if I'm working with teachers, I'm an English language arts teacher, and I'm always looking for materials that, again the cultural

response of teachers always mindful of materials. Are they inclusive to the students and to the community in which I teach? Do they represent the community? And so, one that I really used when I'm working in diverse schools, diverse context is mediathatmatterfilmfest.org. It's a collection of videos that examine certain injustices in our society, social issues, societal issues, as well as taking diverse perspectives on different kinds of topics within our within our social world. The films are great. They're high quality. They're all relatively short. There are some even about the perspectives of English language learners that when used in the curriculum with students who age appropriate and ready for thinking through those kinds of issues they can be used in a curriculum to really invite discussion reading and writing around the community based issues that that we have.

So that's one of my favorites. The other for if you're thinking about reaching out to the families of your English language learners there is a project that I like. It's called Parent Teacher Home Visit Project. This is a wonderful tool if you're thinking about doing home visits or thinking about partnering with parents in ways that might go beyond a traditional parent teacher conference. This website has a lot of resources and videos that will help you get started again for going beyond the traditional structure of your school that may already have parent programs in place. It's like you know how do you really look at again that the family and the learner perspective from the inside? Like really going into the community to really understand the perspectives well. The American Federation of Teachers, AFT.org, has a great part of their site called Sharing Lesson Plans, and they have a special focus if you do search for immigration there's a wonderful resource on lesson plans for helping all students understand our current issues around immigration and our current climate around immigration and DACA and undocumented families and workers and students, and so this resources could be really helpful and culturally responsive teachers are not afraid to tackle issues head on and really are okay and try to try to create spaces for learners to engage these topics as citizens, as people. So that's part of the work of the culturally responsive teacher is to to be okay with that. This site has a lot of developmentally appropriate materials for students at different ages to examine the issue of immigration. Racialequitytools.org is another resource that I've used and tolerance.org is another resource that I like for thinking about ways to engage students in the work of understanding diversity and really the work that you have as a culturally responsive practitioner to understand diverse perspectives and views. And so the hope the hope for all of this work is just to to to be a better teacher and to facilitate learning and to really engage children and our students in ways that make them feel safe and comfortable and and that those attributes really lead to achievement and support the overall goal of achievement that we have for all our students. And so that's the hope for outcome of really thinking through this idea of culturally responsive practice and teaching. It's just you know I'm trying to make a step forward for the students in my class and trying to really own the idea that I am responsible for the achievement of these learners and with some strategic ways of thinking and some tools and some resources, professional development. You know I believe we can all really make that happen.

16. Final Activity: Personal Action Plan:

Complete the action plan document found in the Introduction Appendix. Facilitators can decide how individuals can best complete the action plan (e.g., during training, on their own time, as a group, individually).