

Are you able to hear me?

Yes. Can you hear me?

Yes.

So I was just talking over the phone, and my line is muted by telephone. Let me see if there's a separate phone lines Scott, for the panel. Yes. Testing, can you hear me? Testing? Okay, so this unmute my computer, and I'd like to talk over my telephone, and Zoom has muted my phone line. There doesn't appear to be a telephone connection

just for panelists.

So I'm thinking that in the list of panelists, I give you my telephone number, you can unmute it or drop it in the chat.

In here, everybody can hear you now, so I think you're a good.

Hi everybody, we will start in just a few seconds.

Hey Cynthia.

Hello, good to be here.

We will wait there just like another minute or two,

because I see more people are joining.

Just another minute. Okay. So more people are joining, but I think we are ready to start our webinar. So hi everyone and thank you for joining our fifth episode on the Accessible Classroom Redefined webinar series, Removing Academic Barriers with Innovative Technology. Today we will be talking about Accessibility

as a Foundation of Universal Design for Learning

and how to achieve an inclusive learning environment

through the universal design of learning. So I will start first with our agenda. Okay. So we'll start with introduction with the panelist and then we'll go through what does accessibility mean to you? Accessibility a functional definition, barriers and access in built environment, bring the curb cut to technology, captioning is now expected, universal design for learning principles and guidelines. Then we're going to talk about the impact of UDL, captioning as a feature that promotes UDL, things to consider when creating the budget, where to start on your UDL journey,

and the plus one example and your next step.

Then we are going to have a Q&A session,

so don't worry.

Throughout the webinar if you have any question, feel free to write it down and at the end, at the Q&A session I will pick a few questions. I hope that we can get a lot of questions and answers today. But don't worry, we'll get to that point. So stay tuned. So now I'd like to start with introducing everyone here. My name is me Michal Roche, I'm the Director of Marketing at Verbit, nice to meet everybody. I'd like also to introduce Scott Ready, the Senior Customers Success

and Accessibility Strategist here at Verbit,

and Cynthia Curry,

which we're so happy to host today, the Director of the National Center on Accessible Educational Materials for Learning at CAST. So first Scott if you can say few words about you and introduce yourself and then we can move to Cynthia and she can introduce yourself.

Fantastic. Thank you so much Michal. I'll just give you a little bit of background. I've been in education and accessibility

for over 30 years,

various roles here at Verbit and

then also at other companies like Blackboard and the telephone companies and also worked for various state agencies

and federal projects.

I also have been a Department Chair and Director for Online Education within higher Ed. My parents are both deaf and they are former instructors at the Missouri School for the Deaf where I had the privilege of growing up my first 10 years, and they had housing for faculty. So I had the benefit of being able to grow up on campus at the school for the deaf. So that's a little bit of my background, Cynthia?

Thanks Scott and it's really a pleasure to be co-presenting with you today. I have been admiring Scott Ready for a long time,

as well as a user of Blackboard when I was

an instructional designer at the University of New England, a teacher Education Faculty at the University of Southern Maine. I've also been a Disability Services Coordinator at the university as well as a K-12 Teacher of science, so middle school and high school science. So come to this area of education

from the practitioner's standpoint

but also now working for CAST

from perspective of technical assistance

and supporting others and making sure

that materials and technologies are accessible to learners

and not just accessible eventually

but accessible at the same time that

a material is presented to the class for use whether it's an online course or in any setting, it could be workforce setting. So the in center CAST works across the spectrum, we call ourselves twinkles to wrinkles

because we support learning in all settings.

So I'm glad to be here to share some of what we do and what we know to support you.

Perfect. Thank you so much guys. I think that we're ready to start. The first thing that we wanted to do is kind of like ask you what does accessibility mean to you? I'm going to launch a poll, and I'd like you guys to just feel free to answer, doing it right now. So take 10 seconds, try answering. Yeah, I can see your answer is perfect. Okay, great. Another few seconds and we're done. Thank you everyone. So now I'm sharing with you all the results. Cynthia can you speak?

I can. So removing limitations, providing the full spectrum with accessible content

is what got most of the hits.

Then some other.

If you want to just write in the chat

what you identified as your other, what accessibility means, that would be great, because I think oftentimes people have there, who are in this field? That often comes up when we ask this question. What does accessibility mean to you? We often find that there are people who know a lot and have a lot to contribute during the webinar. So please be sure to be active in the chat and share with us what accessibility means to you and your other thoughts during the webinar. On the next slide, there is the definition that we like to use at CAST

and we use it because for one thing

this is a definition that comes from the US Department of Justice and Department of Education in the US

as a joint definition that came from a letter,

a settlement decree as a result of some inaccessible materials and technologies being provided to students. So the definition that really compartmentalizes

all the pieces of accessibility

is that accessibility is when a person with a disability

can acquire the same information, engage in the same interactions and enjoy the same services in an

equally effective, equally integrated manner, and with substantially equivalent ease of use. So this is a really technical functional definition of

accessibility but it can be very helpful

in any setting in which you're trying to determine is accessibility being delivered

to learners or to employees?

In whatever setting you're working that is inclusive, oftentimes it's unclear whether or not you're meeting accessibility guidelines. But if the individuals with whom you're providing materials to under any setting, they can acquire that information, engage in same interactions, enjoy the same services. It's equally effective, equally integrated and is as easy to use as others. Notice it doesn't have to be the same thing. It can be an equivalent alternative

but it needs to be as easy to use

as what's available unto others.

So this is a really helpful framework to have on hand

and try to internalize

as we're thinking about accessibility.

Here's an example of barriers in a built environment, and lot of people think of barriers

when they think about accessibility

as came out in the poll.

So barriers in a built environment, in this particular image on the left

is an image of an old brick school

and there are staircases leading up to the front door.

And I have expanded, I've blown and zoomed in on a sign that appears next to that front door and it says, disabled persons, entrance at rear of the building. We see this all of the time, less frequently as new buildings are being built

because of the Americans with Disabilities Act,

but we still see it even in some new buildings. So this is sort of the analogy of providing accessibility

in a way that's not equally effective,

equally integrated as easy to use

as people who can walk through that front door.

We can compare this to accommodations for example. There will always be situations where somebody may need a unique way to access that building. But most people would be able to enter that building if there were a ramp, that's more universal approach. So in the next slide there is an elegant solution to stairs

within a physical environment.

This comes from the

University of Saskatchewan arts building.

It is a ramp that reaches

from the first floor to the second floor.

It's elegantly built right into the design of the building, it's modern. I'd like to say that somebody who is an avid reader can continue to read as they're walking up that ramp. They don't have to stop studying. They don't have to stop reading to walk up a set of stairs. Somebody who's using a wheelchair

can easily make it from the first floor

to the second floor,

should they choose not to use the elevator.

So this integrates some choice into the building for everybody. So this is an example of universal access.

We can bring this idea of curb cut to technology. Curb cuts are those wedges that are built into sidewalks. Curb cuts originated in Kalamazoo, Michigan,

and University of Illinois,

and University of California, Berkeley. Really interesting stories about the advocacy

from where curb cuts originated because

of the needs of people on these campuses in cities,

realizing that they really could not get around in accessible ways. So for example, the University of Illinois, lot of students who used wheelchairs

would get on the back of service trucks.

You can read these stories about the origin of curb cuts, they are fascinating. But we know that once the curb cuts became available, lots of people benefited from them. So people who were on crutches, people who were pushing strollers, people who have any type of cart, we know there are a lot of teachers and professors that pull carts. You had those curb cuts as when they get out of their car and make their way to the building. I think that anybody who needs a curb cut would say of the benefit that they brought to their everyday life. So the other thing to think about though, is that accessibility matters by person. So as we talk about accessibility

in the context of universal design

to remember that there are still those occasions,

those situations where an essential accommodation is going to be needed for the student or for the employee whomever is being provided with access. So this is not to say that a curb cut or a ramp or any solution to accessibility is going to be solution for every individual person. We always have to ask accessible to whom, because you just never know what that unique characteristic is going to be.

So let's take this and take a look

at another specific area,

and we have another poll for you.

So I'd like to launch our poll with our next question. So how many of you have watched captioning when you're watching TV or a video? Just in general, how many?

Yes or no?

Have you ever watched captioning

when you watch TV or a video?

I'm seeing that the answers coming in.

Yeah.

We'll give everybody just a couple more seconds to click yes or no and submit their answer.

I know what my answer is.

What's your answer Cynthia?

I say, yes.

What's the situation that you watch captioning?

I multitask.

Exactly.

Usually I am at the gym, or I'm at a pub, or I'm a very diverse person in my interests. So I got a lot of places, I travel a lot, I may go to places where I want to watch the news. If I'm traveling, I want to catch up on what's happening in the world and if I'm in a crowded loud gate, I can't hear the news. So the

captioning.

Exactly. So Michal, you want to go ahead and show us the results on that?

Here you go. So 91 percent have said yes.

Ninety-one?

Nine percent said no.

Okay. So now let's lead with another question. Of those 91 percent, how many of you have watched captioning this week? So now, we're taking it and we're taking a look at the frequency. So within this last week, how many of you have watched captioning? Maybe it was in a restaurant like Cynthia was saying, maybe it's at the airports, maybe it's at home watching a movie on TV, or maybe it's on your social media. If you're looking at your Instagram

or your Facebook and you see a video there,

and you've watched the captioning

as opposed to listening to it in this last week.

Okay.

What's the results?

So 76 percent said, yes. Twenty-four percent said, no.

Okay, there you go. So as you can see from the poll

there's a large percentage of you that

have watched captioning in one context or another. Much like the curb cut, captioning is really reaching a stage where it's expected everywhere. Like Cynthia was saying, everywhere you go, you expect there to be able to have captioning. Let me ask you, have you ever seen on a DVD the option for captions or subtitles and wonder, what's the difference between captioning and subtitle? I've wondered that. Just in case you're wondering, they're really designed for two different audiences. Subtitles are designed for a

hearing audience

to provide a text form of what is being said.

But let me share the difference here,

and it's commonly used with foreign films,

where captions is designed for an audience that is engaging with the content silently and needing the auditory cues such as a phone that's ringing or that it's actually music rather than words being spoken. These additional contextual cues really enables a greater understanding of what's taking place audibly. So that's the difference between subtitles and captioning. So when we engage with media in a restaurant or at an airport or even on social media, we see captions.

There is nothing more frustrating than to see the words on TV saying, "Breaking news!"

and then the captioning being turned off.

We expect to be able to engage with what's being shared. So do you know that over 85 percent of the videos on Facebook are actually watched silently? That is by choice. If content wasn't able to be viewed

and understood silently,

the viewers wouldn't engage. So I wonder, how many of our students

are not engaging with their course content simply

because it's not captioned? Cynthia.

I was going to say Scott, that my answer to that question was, I hadn't watched captioning this week

because I'm writing a proposal.

So I have not seen a screen other than my Word document and Google Docs.

Exactly.

So this leads into Universal Design for Learning and the role of captioning as being a choice. When Scott was talking about subtitles versus captioning, another important distinction is between open captions and closed captions. Having the choice to have

captions displayed is really important.

It goes along with Universal Design for Learning because UDL is really all about

the individual having a choice

about how they interact with the content,

options for them to be engaged with the content,

and various ways that they can describe what they've learned. What have they gained? How has the content changed their perspective, the way they see the world or just their ability to accomplish a task? So the three principles of UDL are based in this type of thinking but really in neuroscience and research, we won't go into that level of detail. We're going to keep this high level. But many of you I know are familiar with UDL and the three principles.

They are based on the neuroscience of networks that control the way that learners interact within learning settings.

So there are three different ways that learners do this. So there are multiple ways that we need to engage learners, and that's the affective network. Multiple ways by which we can represent information or content, that would be the way that learners perceive the information. Then, there are various ways that we can support the networks around strategy, and that would be the way

that we support them in action and expression.

How can they show us what

they know and what they can do?

So it's really about providing choices on how learners can trigger those different networks. So recognition

being the what, how can they perceive it in multiple ways. Affective the why, providing choices and how we might engage them, and then Strategic would be how in terms of the choices by which they can demonstrate what they know and what they can do. On this slide, you'll see a table, this presents what we call the Universal Design for Learning guidelines.

They are available through caste. There are three principles of universal design; multiple means of engagement, multiple means of representation, and multiple means of action and expression. Underneath each of those principals are the guidelines, and then there are a series of checkpoints under each. So these are useful as your set out and try to determine what does UDL look like within your curriculum, within your assessment, what are some of the strategies that you're already applying in in your setting. You can use the checkpoints to determine that. So that's the vertical approach to the UDL guideline framework, and then it's also horizontal. So there are three rows in this chart. The first is access, so access those are the guidelines and checkpoints that relate to ways that students can begin the learning process because without having access to the information, without having access through engagement, or without being provided access to ways that they can demonstrate what they know and can do. If there are any barriers across those three. Obviously, students aren't going to be able to progress to the next stage of learning, which is building on their knowledge in that second row, and then the third row is internalized. That's where we reach supporting learners to become expert learners. That's where they are self-directed, that's where they are independent, where they can make their own choices. So by then, hopefully students are accustomed to being provided with choices and know which choices they want to pursue. Oftentimes without having this scaffolding in place in learning settings. Students are overwhelmed by having choices, they don't know what that means. So it's really important in the UDL framework

to make sure that this is something

that's built in and scaffolded over

time so that students become expert learners. In order to become an expert learner at that internalized stage, we need to provide them with access through that first row. So this leads to the next slide,

which is really that access

is the foundation of expert learning.

It's not sufficient to just provide access alone. I think in a lot of our educational settings, we stop at

access for students with disabilities. We also need to make sure that we're providing the instruction, that we're providing the supports, the training that goes along with that access, and that of course is universal across all of our learners. So it only starts with access, it doesn't stop there. So we have some experience that CAST, that shows how UDL has influenced various environments. These come from some practices that the CAST has had the opportunity to work with in the field. So one is with Chelsea and Revere

school districts in Massachusetts

and work that CAST professional learning folks delivered within Chelsea and Revere, showed that UDL implementation

was able to lower Special Education referrals,

discipline referrals, and suspensions. We think a lot of that comes from just engagement, making sure that students know why they're learning. That they were supported in ways that they can express what they know, what they can do. So it minimize some of the frustration that often comes when learners are presented with barriers to expressing what they know and communicating. That they were given various ways to receive the information through those multiple modes of representation. We know that for a lot of students who have undiagnosed learning disabilities, giving them a standard print textbook will often lead to behavioral issues, give them the format that works for them. They're able to learn,

and typically those behaviors will be minimized.

Test scores improved, but generally and across all subgroups. In the work that was done in Bartholomew, Consolidated School Corporation in Indiana, and that was when we say subgroups, special education, English learners, socioeconomic status, students of color. Then finally, some extensive work

in professional development

that's been happening in New Hampshire

over the past couple of years,

shows that teachers feel more prepared to support students

who have been traditionally marginalized.

So students for whom oftentimes

teachers aren't able to reach

because they just haven't had the training,

they don't have the tools.

It's a difficult position for teachers to be in. Even teachers who want to support students

who have had wildly raging characteristics,

it can be difficult if they don't have the training and the support to do that. In New Hampshire,

there are some strategies in the professional learning

that allow teachers to take risks.

Oftentimes, we don't allow that in schools,

to let teachers try something and be given the support,

if it doesn't work, what are the next steps? So in New Hampshire there's a lot of work going on around supporting UDL implementation, and this is you Scott.

Great. Thank you.

Yeah.

As Cynthia just shared,

incorporating UDL benefits all students.

So let's take a look at a specific item, and that again was initially thought

of as an accommodation.

Just like the curb cut was initially thought of as an accommodation, but it's been come to known as the feature for all. So when we take a closer look at captioning and UDL, we can see that that captioning actually crosses

all three principles of UDL.

It enables students to improve in their success, and let's take a look at one category, one principle for example, the multiple means of engagement. I think this one is fairly self-evident, but if we go deeper than just the ability to read the spoken word, and think about the autonomy of the individual. Now, don't get me wrong. I've been a certified sign language interpreter for over 30 years, but depending on the language needs of the individual, have it be American sign language, or English for example, captioning enables an individual to be independent

of another human being

when engaging with the audible content.

It also enables individuals in the educational setting

to see the exact spelling of the word,

which will then be hugely beneficial

when it comes to testing.

Not to mention the ability

for all students to search the content

and engage with the sections or terms needed,

especially, when English is a second language.

So we see that as a feature of UDL, captioning really does encourage

all students to be able to engage

with the content in various ways.

One question that we often get is around budgeting, and when we take a look at one of the challenges around budgeting, oftentimes, it begins with philosophical approach of the institution. If the institution takes a non UDL approach, or a reactionary approach. An approach that only captions content

when a student with a disability requests it,

then the budget becomes very dependent upon the enrollment of a specific student, and in that case it's very difficult to forecast. So the money spent with this approach

typically only benefits the one student

that requests the accommodation,

which really makes it very expensive. It's really driving a very low return on your investment. But when an institution is proactive

and has built into their policy that video content

will be captioned automatically,

then it becomes much easier to budget. The first step is to realize how many minutes of lecture capture for example, is being created over a year's time, and how much video content exists. At first, there will be some archives of video content

that will need to be captioned as well,

but once the archives are completed, the focus will be only on the new created media content. So content creation and development

comes at great expense including our time and expertise,

props and demonstration that aids technology to create that content, and to present that content. It'd be a shame to not put in that final component. So that students will better engage with the content through captioning. Reaching research as verified as Cynthia was saying that, students in courses where they're

able to access their content more effectively, will see a later grade increase, and that results in students being able to be retained and continuing on to graduation. So if budgeting is a topic that you'd like to have

more discussion around,

we here at Verbit will be having a webinar

on that topic in the near future.

Cynthia, where should we start when we're considering UDL?

Well, CAST has some projects that the people may be interested in. These are really specific to K12 settings, in terms of involving some of the projects that I work on a CAST, but there are other opportunities at CAST

to get involved with our research.

If anybody follows or wants to follow CAST on Twitter, the handle is CAST\_UDL. There's been a call out for inviting people to participate

in some of CAST research across,

not just K12 but other areas,

and that would be of interest to various interest groups. These three projects that I'm going to refer to are really round K12.

The Center on Inclusive Technology and Education Systems or CITES, that project is also funded by the US Department of Eds, Office of Special Education programs. I co-direct the CITES project as well as direct the AEM center. So they have the same funder, lot of similarities in terms of how we run the project. With CITES, we're working with districts,

specifically to develop a framework

that will help bring together assistive technology and EdTech within local education agency systems. So

currently as we know, there's the EdTech department, and then there's the special Ed. Over and over again, we find ourselves in situations

where students with disabilities

who use assistive technology

experience barriers in accessing

the educational technology

that's been selected for everybody.

So the purpose of CITES

is to do some research directly with school districts

to build that framework, co-develop it with them,

try some evidence-based practices within districts

in the development of that framework.

So if anybody is interested in that, they can certainly let me know, I think I'll drop my email in the chat. But that's working with school districts, we're looking for districts that are interested in working with us pretty intensively over the course of three or four years to build some interdependence between your assistive technology and educational technology systems. We call it technology ecosystem, balanced and inclusive. The second project on the list is called the AEM pilot, that's the Accessible Educational Materials pilot, that currently is developed, it's a web-based tool developed for school districts. We will be developing one for State Education Agencies, State Department of Educations, and we also have various innovation configuration matrices for higher Ed and for workforce. The purpose of the pilot is this web-based self-assessment and progress monitoring tool that in this case districts can use

to first do a self-assessment

based on the innovation configuration matrix

on where you currently are. The AEM center provides quality indicators

for the provision of AEM.

Under each of the seven quality indicators are critical components that tell you what makes up

the important parts of a system

to meet that quality indicator.

For example,

one of my favorite quality indicators is timely manner,

making sure that students with disabilities

have the materials and technologies that they need,

features that they need with formats that they need

at the same time as their peers.

So there are critical components

underneath that quality indicator

that explain what parts of the system make that happen.

There are six other quality indicators with critical components customized for school districts, K12 situations. Critical components have been

developed for higher Ed settings

and critical components are available for workforce.

But the AEM pilot is a web-based tool that school districts can use in teams

as a way to start their journey toward

having an accessible system.

Then lastly, CAST has a professional learning, an arm that works with school districts. So for example,

the examples that I gave of the projects

where there were some improvements in learning,

improvement in outcomes,

improvement in teacher confidence,

those three examples came from work that CAST does in the field within districts, also at the state level as well. So CAST Professional Learning is another resource on where to start. Professional Learning is a fee-based

parts of a revenue-generating areas CAST.

CAST is a non-profit. We also have publishing as well as professional learning. But if you're looking to engage in something like that, your CAST Professional Learning of course,

is here to reach out to.

The AEM pilot and the CITES project, those are at no cost to be involved in those, as well as some other projects at CAST. So if you're getting started, you're on your own, you have been introduced to the UDL guidelines

with the principles and the checkpoints,

you want to take a closer look at those, it can be overwhelming. Having been a teacher in K12, having been a teacher in teacher education, even having a background in UDL, still very overwhelming to know how do you implement those principles

and checkpoints within your curriculum.

So one place to start is just sitting down

and looking at the UDL guidelines.

They are on the CAST website, [udlguidelines.cast.org](http://udlguidelines.cast.org). Look at them and see if you find a particular checkpoint that resonates with you, maybe it's something that you're already doing

within your curriculum, within your assessments.

You are starting at access is what I recommend because access is the entry to expert learning. Again, access is essential to learning, but it's not sufficient. So starting on that first row

and identifying what are multiple ways

that I can present the content to my students?

If I have a standard print textbook, is there another way

that I can bring that text to life for students

without breaking copyright of course? So it can take some creativity if all you have is that standard print textbook. Of course, there are ways for students who need the accommodation to get that textbook in other formats, but printed textbooks do present some challenges for UDL and it require some creativity on the part of the teacher to bring that content to life for any student for whom perhaps they're not eligible for that book to be in a different format. So choose one of those check points, take a look at it. Then there's a plus one model that we'd really like. This is from Thomas Tobin, who those of you who are in higher Ed may know Thomas. He had this brilliant plus one. So whatever you're currently doing with your students

by which you are giving them the content,

you're representing the information of the curriculum in one way, maybe there's one more way

that you can present that content.

If it's in text, is there a way that you can find a video that presents that same content? Another way to engage students in the content, perhaps you've been using one way, there's always that dreaded

question that students ask, "Why do I need to know this?" and maybe you have one answer for that, maybe you can come up with a second answer, maybe you can engage students in an example, in an experience that will help them understand

why the content is important.

Then lastly, one more way for students to express what they know and what they can do. So if traditionally, students have written an essay to meet a standard, perhaps there's one more way that you can add for students who perhaps they are gifted orally and writing presents barriers for them. Is there a way that students can meet that standard, meet that requirement through an oral presentation, or a video, or any other way that they can use their strengths in speaking? So those are just your few examples

of thinking differently about where you are now

and just adding one more way, one more choice for students

to be successful independent make progress.

I always like to ask participants, and we won't do this as a poll, but just to think about it, I always like to ask participants whenever I'm giving a workshop, how many of you like for somebody to provide you directions to a local restaurant by telling you right and left turns and orally give you those directions? Then, how many of you prefer to actually see a map and visually be able to picture

in your mind how to get to that location?

Or how many of you prefer to have somebody actually physically drive you to that location

so that you can follow somebody and then be

able to get to that same restaurant on your own in the future? None of those options are right or wrong, but they are just different options that meet the needs of various individuals. Personally, if I can see a map, I'm great. That's why with GPS now, I'm completely ignorant of the city that I'm in when I'm relying on GPS

because this person just

audibly tells me where to go, and I have no visual context as to where I am in the city. So I use that

example as another way of being able to add a plus one,

kind of an approach to giving directions

depending on what that person's preference is.

It can be contextual, right?

It can be.

So it may be that when you're planning your trip, you prefer to use the visual, but when you're actually driving and you're following the directions for your pilot and you're the co-pilot, it may be that you prefer to see the list of steps to get to your destination.

Exactly.

So context is king.

That helps to drive the approach

that really meets the vast needs.

Angel had a question in the chat about not forgetting audio description.

Yes.

I think that that's so important. I think we focus on captioning because there are tools currently in place that support self-captioning, Vimeo, YouTube. They have the means. It's actually been simplified. I remember 10 years ago, captioning YouTube videos, and it taking hours. Now you can just start with the auto captions and correct those.

You don't want to just leave the auto captions, because they're not typically accurate. Sometimes they are, but you're leaving it to chance. But it's very easy to edit those captions

that are auto-generated by YouTube.

So I think that's why we focus on captioning when it comes to UDL, because it is something that is available. I think we are learning more about how educators can audio describe. But it is an art and a science. I think that we need more systems and support

to have increased the frequency

of encountering videos that are audio described.

I agree Cynthia.

When we look at the educational setting,

the audio descriptions really has to relate to the content of what's being communicated or what's being conveyed. When we look at a movie, it's very easy to audio describe

the important parts of the plot of the movie.

But when we look at educational content, I know I've used this example in the past, I can have a video about George Washington. It could be audio described as to what he's doing, but the importance of that content

is really to look at the period clothing

and to match the period clothing

to the content that we're studying. If the audio description does not

describe the period clothing,

then that audio description has missed the point

of the importance of that description.

So as Cynthia said, I think that as professionals in the field in education, we really need to come together

and further define what audio description means

in the educational setting,

and how we can effectively accomplished that.

So I'm glad you brought that up Angel. I love that topic. That's a topic that Cynthia and I both have been discussing here over the last several weeks. So thank you for bringing that up.

Yeah.

Go ahead Cynthia.

I was just going to say it applies to

image descriptions as well,

image descriptions need to be described in contexts. So for digital books or websites where images appear, it's not just a matter of saying a description of what the sighted person sees, really needs to be in the context of why the images is there. Under what conditions is that image being used to convey that content. So a lot of parallels between

audio description and image description.

It's time for a few questions here from the audience. So first question, if we're going to share the presentation. So yes, we will share a link for this webinar, recording of this webinar together with the presentation.

So don't worry.

For those who couldn't join, you will get it in like a day or two. Second email is from Collin Cornish. So she is asking, when will the ADM self-assessment and progress monitoring tool be available,

and how can we get that?

I love that question. So the AEM pilot and this is the version for districts. So we as part of our project, our AEM center grant,

we asked for some set aside funds in order

to develop this tool as a supplement

to our other technical assistance.

We had to bring the quality indicators to life. So you'd imagine the quality indicators on your screen, or if you print them out, they're very wonky,

there's a lot of technical language,

a lot of legal language, a lot about accessibility. So we wanted to develop a tool

that would help scaffold understanding

of the quality indicators

and the critical components in context of the setting.

So we're starting with districts. That tool is currently out for review. We have a set of what we call our Invest Practices leaders, in the states and they are giving us some feedback on the quality, relevance, and utility of that tool. We're incorporating their feedback and we expect to release it in September. So if you follow CAST on Twitter, or you can follow the AEM center and I'll put the handle in the chat. I see my colleague Luis Perez is here. So he could be doing these things as well. He had a great comment about multitasking

and an audio description.

So we will be piloting the pilots in September. So if you follow us on social media, you can also go to our website, that's [aem.cast.org](http://aem.cast.org), and sign up for our newsletter. At the bottom of the homepage there's a link to sign up for our newsletter. We will obviously be sending it out to our list that way as well. So thanks for that question.

Great. The next question, in the attempt to provide access, can it be taken too far

where it becomes the modifications.

So explaining the situation, working with a blind student who refused to use a screen reader to access Canvas, our online learning management system. Students expect instructors and DF office do convert all courses content and textbooks to Word document, and email them to her. So she can read them through her [inaudible] patch device. It's one person office with caseload of nearly 90 students

as well as the stop interpreter.

The time to convert all electronic PBS

[inaudible] material to word,

this is very stressful. So Scott, I think you can take this one.

Well. I actually, I'm going to ask Cynthia to take a look at this one

because she's actually been in that role

of having to manage that in the past. Correct?

I have been a disability services coordinator. I've also worked within a department in higher Ed. So as a faculty member. So I've seen it, I've seen this from both sides. The solution is that it needs to

be an institutional solution.

That there needs to be a systems approach

to making sure that students have materials and

technologies in accessible formats and with accessible features. So it's not one person's responsibility. I think that's really important. I think oftentimes people don't realize the complexity, the tediousness, the labor intensive. You can see I've done this before. So I certainly know that this is very difficult to accomplish in a timely manner. It's a service to our learners

when an institution or an agency

comes together as a system

and is able to resolve these issues and backtrack.

What I like to say is, okay, envision the student receiving the material

in the accessible format with accessible features,

and then work backward to the source of that material or that technology and follow the pathway.

Anybody who is part of that pathway, or just peripheral of that pathway

needs to be part of the discussion around

how do we ensure that accessibility

is part of the procurement, part of the curation,

part of the, I just said curation,

but also part of the creation of materials that are developed. So it's not simply what's purchased, but also what's developed by instructors and by teachers. This is not easy. I think that's an important point to make is we're not suggesting that this is something that institution can turn around and do,

even within a year.

This takes time.

But the quality indicators for the provision of AEM, that the AEM center has

can be that it's a systemic approach

to thinking holistically and systemically

about where within the pathway from the student

back to the origin of the material and that technology, because we know that there are so many different pathways by which students receive their materials and technologies regardless of the setting. Who needs to be a part of that? Who needs the training? Who needs to receive the guidelines? Who's going to write the guidelines? What's the expectation at the institutional level? Because you need to start with, this

is an expectation that we are going to require, ensure that accessibility is part of the system

by which students receive materials and technologies,

and it really becomes a stance. Oftentimes, we're asked, well, are there things that don't have to be accessible? No, so if one thing is not accessible, you've broken the whole chain. So it's really important to understand that it's really a stance and it takes time to get there, but I think with collaborations, both internal and external talking with vendors really have learned a lot about accessibility, they're trying to be responsive to the market. So I think having those open conversations between state education agencies, district schools, higher Ed, these conversations between the purchasers and the vendors is a really important part of this process.

I think also in addition to that, access should enable independence,

not more dependence.

So in the situation that was described, the student is creating a workflow, that is creating more dependence on individuals to provide that student access, where that student could have more independence by using some of the technologies and the tools that are available to be able to engage with the content on that student's own way. Also it's not preparing that student well for the future. Who's going to be the person in that student's future outside of education that's going to go to every website and print that website so that the student can only engage with that website's content in that one way. So I appreciate the question,

and yes we want to be sensitive to that student's needs,

but the student also needs to look for ways that they can be more independent and being able to engage with the content and be a learner of the content.

That really backs up sort of into the transition phases too and preparing students to do that. I agree, anything that we put on students whether as a display services coordinator, I strived continuously to try to take burden away

from students in the process of providing accommodations

and I know because I recognize some names that

their display services coordinator is here with us today. I think that definition of accessibility

is what we're always striving for,

substantially equivalent ease of use, equally integrated, equally effective, we want to minimize any burden on students, and that's difficult to do. So it is the interactive process of determining how to do this as efficiently as possible, and when students arrive in higher Ed having that self-determination, that familiarity with what are the choices by which I can access this information, what tools have I learned before coming here, the better people they're going to be. Because when students get to their first year of college, they're typically so overwhelmed by the content, the idea of having to learn a new technology to access the representation of the information, we sometimes end up peeling them off the ceiling because they're so stressed. So anything that we can do in K12 to prepare students just to be independent

with various ways that they use assistive technology,

accessible materials is more of a service we're doing for them.

I think we have time for one more question. Is there another question Michal?

Yes. So one question, is UDL an option for me homeschooling?

That's a great question. Yes.

Yes.

Yes. Absolutely. I'm curious how many children are you homeschooling. My mind, of course, jump to one but I have a friend who homeschool six of her children and increasingly is picking up kids from the neighborhood. So there's learner variability across students and then, of course, there's learner variability within students. So those choices really aren't intended just to address variability based on the profile of students within the class, but also for students to have options based on the context and the situation where they're actually conducting the task, what is the content? So oftentimes, students, if they learn how to do this, they'll mix up the ways that they interact with information based on multiple factors as well as express what they know, and we need to also mix up ways that we engage them. Because knowing kids usually takes more than one try to engage them. So coming up with various experiences, contexts, examples to engage even one learner is part of UDL.

It's a great question.

As we homeschooled our kids and very much incorporate UDL into our curriculum and being able to not only have them read about or watch a movie about, but actually go and visit, and experience, and do activities there that they've read about, that they watch movies about that. Then they could talk to the people there and share with the people at that location what they've learned. So they were being able to express themselves in various ways not only to us, but also to the experts there at that location. So there's so many ways that you have that flexibility especially on a homeschool setting, where you can really incorporate multiple means.

Okay. I think that's the end of our webinar. Thank you so much Cynthia, thank you so much Scott. I enjoyed it. I hope you guys all enjoyed. Tune for our next month of webinar, I will send you more information about that. As I said before, we will send you a captioned recording of this webinar in just a few days. Thank you so much everyone. I appreciate that.

Hi everybody.

Thank you. Take care.

Bye.

Bye.