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EDUCAUSE
Universal Design for Learning to Support Remote Learning
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Hello everyone. And welcome to this, our webinar, Universal Design for Learning to support remote learning. This is Malcolm Brown at EDUCAUSE and I'll be your moderator for today's event. By now I assume you are familiar with our interface for our webinar but here are a few reminders. Please use the chat window on the left side of the screen to submit questions and share and submit resources and comments and Q and A pauses in the course of the presentation and of course at the end as well. We encourage you to type your questions into the chat space during the we are nature and present them to our presenter at those Q and A breaks. Use the tag hash EDUCAUSE webinar and if you have audio issues click on the link at the lower left-hand corner of the screen and at any time you can connect with technical help by connecting with the chat window. A drop-down menu with will appear and select start chat with and then hosts. The session recording and slides will be archived later today on the event site. I think you would have needed to have been living isolated in a calf not to have heard about two things, the virus pandemic and Universal Design for Learning. This is these two teams that bring us together today for this webinar. For the past two months we've been navigating unprecedented challenges in most teaching and learning and in such circumstances that equal for quick off the cup and it can be challenging. It seems appropriate to spend an hour to think about hour situation and important goals around access and inclusion and ways to maintain and strengthen that connection. We are fortunate to be joined by Sam John ton today as director of workforce development. Sam are Johnston provides thought and operational leadership and postsecondary opportunities and research focus on learning processes and use of online blending support peer-to-peer knowledge transfer. I use the term fortunate because she joined us on last minute arrangement and also with Sam we have one of the leading experts on universal design so take advantage of this situation by putting questions in the chat space. Without further ado, welcome please begin.

Thank you, Malcolm and thanks, everyone. Good afternoon for many of you and thank you for taking an hour out of your day as I'm sure you are juggling teaching and instructional design technical gee support to a virtual format. It's not easy for anyone but our hope is some of this will be helpful for you today and we really are introducing you to some of the resources that we've created at cast and other resources as well. Cast went to national center on acceptable educational materials and technologies and we're hoping you'll leverage these resources in the weeks and months ahead with the goal as Malcolm said sort of making our learning environment which now changed quite a bit for most of us inclusive and thoughtful I designed from the outset for all learners. That's our intention today and please go ahead and share questions and conversation in
the chat. It's just as important for you to have access to one another than it is to have access to this information today. Please use the chat in that spirit as well. Everyone is entering about goals and organizations in the chat. Which is great. Feel free to add something you'd like to know. I'm as Malcolm said the director of postsecondary workforce at cost and we still actively research Universal Design for Learning, the guidelines that are structured around and we do a lot of professional development support in both caseload, higher ed and in the workforce. We really have a single ambition at CAST and this is really the barriers to learning that everyone experiences every day. It's clear to us in this current situation because we're rethinking how we do things but there are learners that require thoughtful design from the outset and require us to not really design one size fits all mentality. One learner is quite different from the next and context from the next. If you find somebody who is brand new to engaging in a certain course. Imagine a language learning class. I don't have the background knowledge or the habits and practices in that class that someone with that background knowledge and experience with learning that language might. I might be different in that class than I would be in a class on a topic that I studied for years so there's a lot of differences from one learner to the next but differences also and we want to design carefully and at cast we help apply insights from the learning sciences ranking from neuroscience to research on teaching and learning and using cutting edge practices to apply to educational design and implementation and Universal Design for Learning which we'll talk about today, we pioneer the cast and it is and always has been our main lever for change and creating learning environments. While this doesn't take much to think about the why, of why we're here thinking about this now. But the reality is for the vast had majority of instructional designers, faculty members, educational technology specialists and higher education institutions right now you really are having to move in a way and adjust in real-time and having to do that in the context of managing your own challenges that may not relate to work your safety and that of your family and we want to offer strategies around universal design that can be adopted right away to support you as you move along this road over the next few months. Equity is really essential to all our work in higher education but when we think about equity of courses that are delivered at a distance online in other ways all students really need with equity to deliver instruction and we need thoughtful approaches to support students within the models for teaching and learning and higher education institutions all over the country are planning and delivering courses online because of COVID-19 and these strike that strategies today are meant to support ways in which you might do that and in addition to practices thinking about a framework that can help you with whatever practices you use to meet the needs of all your learners. It's good to remind ourselves about the populations that are served by one fits all. Students with disabilities in higher education /-GS students represent 19% of our undergraduate students that report a disability. Twenty-six of undergraduate students were veterans. 23% of these were over thirty and twenty-one to twenty-four were in de pent end to 19% of undergraduate students reported a disability but that number gets higher with certain subpopulations, veterans or other students living independently and their education independently and then as we think about the working age population 35% of that population are people with disabilities, 35% of the working population with disabilities are employed which are much less than the working population with disabilities so while we have individuals with
disabilities we're not doing as well as we might to get many of our students in to higher education through higher education and actively employed in the workforce and that's what we want to be able to do for our students with disabilities but with all our students and we need to do that by thinking from the outset about designing a way for everyone. Universal Design for Learning is a framework and it was first defined, the statutory definition and the higher education act as follows, the term Universal Design for Learning is a scientifically valid framework for guiding educational practice and A provides flexibility in the way information a presented in the way students respond or demonstrate knowledge or skills and the way students are engaged and B reduces barriers in instruction provides appropriate instruction supports and maintains students with disabilities and students who are limited to English proficient. Since that statutory definition of higher education opportunity act it has been included in every piece of federal legislation at the K-12 level that governs education and the reason for that is it's a proactive and systematic approach for designing for diversity from the outset as opposed to have to retrofit after the fact because we find not everyone is going to use information the same way and be able to demonstrate their understanding in the same way. So the goal is to be proactive and anticipate that there will be differences in how people engage and how they take in information and how they demonstrate their understanding from the very outset. And the UDL guidelines are really a way of taking this concept of designing for our broad user base and operationalizing it. The guidelines are initially based on over eight hundred peer reviews. Articles and really represent best practices in education but they really breakdown in three ways. So we look at the guidelines in two separate ways. First we look at them really in terms of three principles and these are grounded in what we know about three large networks in our brain. And the first is really that we need to provide multiple means of engagement and we do that because affectively the sort of part of our brain that really addresses why I would pay attention to this in the first place that really motivates us to engage in learning or often if something is not motivating make us not turn our attention to something. We need to think about the fact that those motivational pathways are different for different learners so we need to provide more than one mean for learners and that begins with how do we recruit interest knowing that people in our classroom are quite different? Some students might really like novelty so having something that is spontaneous and fun is great for some students. Other students like to know what's coming and predictability. How do we build options so students that are different from one another in terms what's motivating can have their interests and we are adding adequately recruited and it's not just about recruiting interest but sustaining efforts and persistence so what can we build in to support sustaining efforts and persistence and what are those habits, so in terms of engagement how do we support self regulation of ones emotion so that they can pay attention in the context of a chat? They can pay attention in the context of the context we're in right now which is emotionally taxing for some people. How do we get them to generate the types of behaviors and habits but let them persist if they are moving into teaching and learning and that's how we think about the principle of providing multiple means of engagement. If we think about our recognition network which is really the back of our brain but how do we really take in information? And we take it in through all our senses in many different ways and we need to provide multiple ways of representation. If we represent content in just one way we're sure to miss our learners and how do we at the outset
think about the accessibilities information? Can people access that information in more than one way? If we're using a delivery mechanism can everyone hear the information? If someone has their sound turned off can they still get that information? We use captioning right here in this webinar because we don't assume everyone can hear what I'm saying. And then we sort of think more deeply around reputation all the way through so how do we build in supports for complex vocabulary terms, supports for understanding how to read Mac notation if you are using a screen reader all the way through to how do we support comprehension? How do we make sense of that information and our background knowledge and the experience we have the future that we want. How do we comprehend the information that we're taking in and turn it into something meaningful that makes sense from the context, the program and study that we're pursuing and future career pathways and how do we provide means of action and expression and that relates to our action to be strategic and use our executive functioning skills, our planning and organizing moving ahead and taking information in and turning that into skill development, turning that into performance based assessments demonstrating that we understand the information that's been given to us and that's give us all the way through from the beginning of where someone physically might be able to engage with information differently. So if you imagine somebody who has a repetitive strain injury in their rib and you were asking them to demonstrate supply chain by dragging and dropping in a certain order, a sequence, and they were not able to use the mouse you would be not getting information on whether or not they knew the supply chain. You'd be getting information on whether or not they could Drag a mouse. So physical action. You want to make sure that your deliver mechanism would have a keyboard option for somebody who could not manipulate the mouse. You want to think about providing information in more than one media format so that for somebody for whom reading a ton of text is not feasible that they would be able to get that information in more than one way or be able to express understanding in more than one way. That we wouldn't just say you are now at home and need you to show me that you me that you understand these three principles by demonstrating them in a four-page essay. Right? We want to give people choice in how they demonstrate understanding and express that understanding and that's important as people have access to different technologies, are in different context and managing school responsibilities and all the way through to putting supports in place for executive functioning for how people plan and move along. We look at these three principles, providing multiple means of engagement and representation and action and expression and deepening along the way with a goal of providing options and choice so that people who are quite different from one another can access information and engage with information and act on information and demonstrate what they know but we look at these guidelines horizontally creating access and we'll talk about that a little bit and making learning meaningful, how do we build learning skills all the way through to building independence, self-regulation, executive functioning, good comprehension skills in ways that learners even in these current circumstances can still show up as really good learners because they have these behaviors and habits that allow them to persist when it's challenging. So I'm going to just pause there for a minute and see if there's any questions or misunderstandings or comments that people wanted to make at this point as we've sort of gone through the guidelines and then I'll move into practices.
Sure. There are two questions here, Sam. I'm going to read them together because I think they are interrelated. Valerie asked is UDL synonymous with universal instructional design and can you speak to the intersectionality of accessibility in UDL?

Yes. So let me take that second one on, the intersection of acceptability UDL first. Accessibility is part of UDL. It's really that first layer in terms of expression and if you don't grasp accessibility then you can't have learners that have access to information, certainly physically your learners with disabilities that require accessibility of materials and technology. And you can't really then take information and turn it into meaningful learning so people don't or can't access the information in the first place. They can't then persist onto learning. So accessibility is sort of if you think of building your house it's absolutely your foundation. You can't build your floor if you don't have your foundation. Accessibility and access are not the same thing. Access can mean a lot of think, providing, open education resources in context because you have students that may be using -- I saw there were a number of librarians in here, using the library text course because they couldn't afford three hundred dollars out-of-pocket for that text. Students may need access to that information. Access can mean a lot of things. It can mean am I motivated? Is it recruiting my interest in engaging me? Can you imagine telling your students they need to move to online platform they've never seen before but you don't provide instructions on how to use that platform you are likely not to recruit those students interests and they can't access the environment that you are trying to ask them to use so really access and accessibility are both important. They go hand-in-hand and they really require to get to those deeper layers of UDL in making that meaningful and building those behaviors that we want students to use across any learning environment.

And the other question, Sam, was whether UDL is synonymous with universal instructional design and there was some conversation I saw in the chat about thinking that is does UDL focus on the learners focused on the learners perspective? Any comment on that?

Universal Design for Learning is focused on learners and instructors. The UDL guidelines really are a way of operationalizing an approach to creating learning environments that are thoughtfully designed for the broad range of learners that are in environment. That doesn't necessarily you'll lose things or not need things like accommodations. You could do very good Universal Design for Learning and still need accommodations, assistive technology that integrates well with a universal design environment but it's the framework that allows us to look at learning goals, the materials and technologies, the methods we use to teach and the affects and that's how we think of the curriculum and to think about those from the perspective of a broader range of learners. So one assumption we always make in UDL is that disabilities are not really just in a learner. They are about the intersection about the learn are and the environment and how do we create environments that support a range of different strengths and that reduce barriers for learners who would not be effective in environments if everything is delivered in just way or one way of excessive people so it is an effective way of examining and addressing curriculum but it
is also very much learner centers and the fact that we're looking at what the intersection is always between the environment and the learners and we're looking at okay what's the goal, what are we trying to achieve in this unit or this course or this program and how do we try and reduce barriers so that all learners in this environment can make meaningful progress towards those goals.

>> Okay. Thank you. Given the time is moving on, let's continue. So Sam, please continue.

>> Great. Yes. So one thing we wanted to draw your attention to is UDL on campus. It's just UDL on campus dot cast.org and this is something that we developed handful of years ago with technical colleges and funding from the organization and what it is, is a practical guide to help stakeholders implement in the section. There's a section in there on course design and a section on media and course materials. You want to think about how to use video in your course and there’s resource page there just on the video. If you want to think about text there's a resource just on text and we'll highlight some of those today but we wanted you to know those resources exist because it was designed with online and hybrid courses in mind and community and technical colleges as many of you probably were where the Department of Labor put a lot of money into supporting career pathways through new community college programs and many of these programs were online or blended in nature and so we'll highlight that but we hope that this will be a good support to think about practical ways of implementing UDL in your setting. So if we think about the first area of the guidelines really around creating access, what are some things we can do now as we move into or have already moved into offering remote learning? It's about recruiting interest. It's about making sure that the information is perceivable by a wide range of learners and making sure that different learners can manipulate and access the information that's available. One important thing is to understand accessibility as defined in the dear colleague letter that went out to higher education President of higher education institutions. But it really says that a person with a disability can acquire the same information and engage in the same interactions and engage the same services as a student without a disability in an equally effective manner and with equally substantive point of view. When we think about accessibility it's not something we think about after the factor retrofit. It's about making sure that a person with a disability has equally integrated access to those materials, to those delivery technologies that someone without a disability has access to. So what can you do to really think about this? Well one of the first things you can do in this setting is really find out what your institutions policies and practices are around accessibility and accommodations as courses move online. You may know those things already but if you don't it's worth connecting with your disabilities services office and worth connecting with your department or connecting with your instructional designer departments to think about what is being done around accessibility and accommodations as courses move online. And then sharing policies and resources with your students and add those to your syllabus if it is online and we did a webinar a little while ago just specifically around thinking about adjusting your syllabus in the setting and I can share that out but really if you sort of make clear to your students that you are aware that some students will have accessibility needs and needs for accommodations it does a lot to make them realize that well oh my needs are still being considered as we move into this new form of learning. I haven't or people haven't forgotten
to think about accessibility and accommodations that I may need in this new environment and then really informing yourself about where students can go for help and sharing with students early and often what you are doing to try to build your own best practices and your students best practices to really make information available to all your students. So, you know, good sharing with one another here in the chat. Maybe sharing what you know about how to address accessibility as students move online and you can share this by e-mail by the social media Twitter handle that Malcolm offered or jot it down really to think about how you are going to get some help around accessibility because you need it and we'll share resources here too because we've been offering a lot of webinars around accessibility around educational materials but the really important thing to understand with accessibility are the guidelines and we've done some things to put those four principles in plain language and as a colleague of mine likes to say he talks about pouring on the accessibility and what that really means is that the information is perceivable. So people who can't see the information can still access that information. They can perceive the information that's coming at them. But it's optional. That means I can manipulate the interface and I can manipulate the information so that I can get the information that I need, that it's understandable. So for example, if you are asking students to use the new technology in your course that you provide understandable and plain language instructions and hopefully demonstrations of how to go about using that technology so that you don't create a barrier of them being able to get in. I have three young children and I know that understandable in terms of all the offerings they have now in remote learning is a big issue so how can you make sure that the interface and content you are putting out for students is understandable by your wide range of learners for who English was not their native language or someone who was not a whiz at technology and then robust and that means that the technology you are using works across different browsers or work effectively if someone is getting the information on a tablet versus a desktop versus a cell phone that that information re flows appropriately to that context and that it works well with other agents such as assistive technology so the way we think about making it available for all learners is making sure they are perceivable, operable and robust. Take a sigh of relief. No one is expecting you to be perfect here but you can start by adopting practices that are going to go a long way in terms of making content and technologies available. So for example you can work to include alternative text for visual information. That means that someone who can't see that information has a text description of that information. That's really important for someone who can't see it but it's also important for someone for whom maybe they are in your class but English is not their first language and they can take text and put it into a translation and now all that ever that is in their language. Transcripts are important not only for somebody who can't hear the content but people are in busy environments and maybe in a noisy room being able to read the captions on an instructional video is better than having to listen to it. So those are things that help with that first one, perceivable in a significant way. So on UDL on campus we have this recourse around videos because they can be a powerful medium for conveying information, showing practices rather than telling people about them. Many of you offer hands on forces. Being able to show things is important and they are important for connecting with people now. A lot of your students want to know that they can still see one another, they can still see you. Video can be really powerful. Captions and transcripts tied to your videos applies to a
broader range of learners. Every resource has on the far right-hand side a call out box around accessibility and has best practices around accessibility for video and all the resources are structures around the same way in UDL. What's this resource, why should you look at it? What the UDL connection along the three connections of multiple means engagement and they provide an example and this is a resource you can go to videos you select or select yourself or ask your students to create to make sure more people can access those videos and they are not designed with one size fits all. There's a show why captioning is so important. For example this is a video on Newton's first law, the influence of friction, the instructor records a lecture and uploads it in You Tube for students to use. It's posted without captions and it's difficult for anyone to understand what is going on if they can't hear the instructor. It's posted with automatic captions in You Tube. So the problem with automatic captions they are good 90% but if they get that 10% wrong it can be bad so this video now of me tells me that this professor is going to arrest romaine and I am thinking it has to do can cooking and romaine lettuce which is not what the professor had in mind so it's not realistic for creating accessible video. There are resources for creating accessible video and it's easy to do. UDL on campus, look there and it should be helpful. There's easy guidance here on how to create captions and transcripts from video that gets posted to You Tube so if you have a You Tube channel and M cam cadet is a free tool used to create captions and audio descriptions and these are posted for detail. So who is in the room, face descriptions, all of those details that you might take in that would help you understand the context and help you understand and comprehend the information that maybe aren't exactly what the person is saying so it's this descriptive aspect. Even taking on that practice of captioning and transcribing your videos will go a very long way to making video. I'm using video in the context of your courses in a way that is more available to all your learners. So another resource related to poor because we just went over the P. One example of the P is on our AE M dot caps.org. There's these short courses called designing for accessibility with poor and they cover many of these practices so captioning videos properly, creating image description for visual information, so if you go there you can look at how to really bring poor perceivable operable and robust into your own practices and take your own time. You don't have to become an expert on this overnight but little by little these practices will go a long way ensuring all your students are able to access your information in more than one way. And so the also part of the AE M center is there's online modules so you can go in and look at these very short online courses. They are all free to surround the practices of poor. So I'm going to pause there and see if there's any sort of questions, Malcolm, that have come up and then we'll look at these other areas going from just making sure the information is accessible and to translating accessible information into meaningful learning.

Yes. An instructional designer at Fort Lewis College asks the following: How do cultural consideration fit into the concept of UDL? The course requiring students must touch human bones is a taboo so what about cultural considerations such as that?

That's a very good question. UDL is not culturally response to pedagogy or teaching. It absolutely should be combined or considered in conjunction with that and there was a very good
article. I’ll find it and share it with Malcolm afterwards. It was a panel discussion engaged in a
discussion just about this so I can send that along to just sort of talk about how the two might
work together and they are both incredibly important for making sure that we’re thinking about
the broad population of students that we have. The one thing that I’ll say is if you were to look at
things like the access layer and look at this first area around motivation and engagement and
thinking about, you know, how do I recruit interest, if you have in your course for students to do
something that culturally is taboo you’ve lost their interest before you’ve even started them in the
course. I do think that the framework and the questions that it poses about really designing for
online learners can be useful in terms of culturally responsive approaches. With that said, the
specific approaches used will depend on the context on the specific learners and I will say to
Malcolm that that panel discussion related to where UDL and culturally teaching fits together, I
found it helpful and these are certainly not at all the same thing but they are both areas that are
thoughtful areas of practice that think about our curriculum and think about when we design one
size fits all we’re sure to provide something that’s ineffective for large parts of our student
population.

>> Okay. Thank you, Sam. Let's continue, please.

>> Great. So as I said, the sort of next piece we deeper looking horizontally from access and
making learning meaningful to next piece. There's a lot of things that do happen, need to happen
now to really make learning meaningful. I will say it's a start by even considering broadly how
your varied students access learning. You are making learning more meaningful because you are
thinking about the context they are in, you are thinking about their circumstances and they are
able to register that as oh this environment has been design for me. I'm going to take this next
step of not just taking the information in but putting my best effort in and turn this time into time
where I can really make meaning of the learning

This layer is really about
sustaining your effort, it's really about sort of providing the kinds of supports that are embedded
to make sure everyone can understand so supporting background knowledge and understanding
that's different for different students. How do we bring in options for something who has more or
less, they are able to access it using high-quality glossaries, like multi-media glossary so that
students who may know the term from a course cannot use it and students who m
will assume that some people will need captioning and provided it proactively so making sure that if you are thinking about using these technologies not everyone is going to engage in the same way. Offering choice, giving people a choice. Some people may don't want to participate or can't participate live in an online forum. They may need to mostly stay on mute. You heard my oldest son jump in and say boo. Sometimes I'm in a conference and I need to be on mute but I can use the chat window so giving people choices about how to participate and using the speaker, whether it's a professor or they are speakers, use a webcam, that's important for engagement and comprehension if someone needs to lip read for example. Having people introduce themselves before they speak and having students do the same. Sometimes people are in places where they don't have high bandwidth and may be on Zoom or Adobe and need to keep their cameras off. If they all start talking it's hard to follow the conversation and then pacing the delivery so students have time to digest what's been said and that's important if they are looking at something while talking because you are expecting them to follow a process you are teaching them and listen to you and follow the chat all at once it can be really challenging so thinking about we're asking a lot of students all at once. We're also asking them to master new technology, pacing and maybe slowing down the delivery a little bit would go a long way towards affective communication and that they can take that information and make meaning out of it, make meaning out of a conversation, who spoke, who said what, that person made that comment, I'm going to follow-up with them later. All these things help to take information and turn it into something that people can make sense of. As I said, sort of providing options for communication so I mentioned the idea of people to chat or raise their hand or use their microphone that's important for people who have varied communication. Some people may not be able to be in your live session at all or dividing their attention between you and something else so giving them a chance to e-mail afterwards or doing a summary at the end of the week. Hey, here's some of the things I heard people didn't understand this week. Here's a roundup of confusing points this week. How can we use that to share out where other people may have confusion? And then really providing students with some structure. So if they know that the web conference is going to happen this way at this point there will be breaks and they can put their attention in more. Here's to structure what's expected of me and how I'm supposed to do it and where you can breakup larger groups into smaller ones. Many technologies have breakout room features and you can break them into asynchronous and use and sub device by alphabetical order, A to Z you are in this group or interest groups, finding ways to allow students to have that smaller connection with one another that they may be missing now they they are learning remotely and then enhancing live delivery with other method, where possible providing Power Points or materials ahead of live conference or meeting and checking Power Points through accessibility checker and if you go to AE M there's guidance on how to go about doing that but someone may need the information ahead in order to be able to engage, they need the information in front of them to be able to take notes as you are delivering your lecture or talk. It's important. You know, creating things like a multi-media of terms that you can keep on your course site can really help with making sure that okay these are the key terms I need everyone to know and they are all in a common spot and I'm expecting people to be able to go back to that. One practice we've used a lot which is helpful for supporting understanding is allowing students
in each class to take notes and then post those to the course site and that's a value because different students have different perspectives sometimes on what they heard or some students are going to catch some things and miss others so students have access to okay here are handful of different notes that were taken and I can go look at those and I'm more likely to get all of the information. Now the professor needs to access those notes for accuracy but as long as they are giving different representations essentially of the live session can be very helpful and can make sure that you know more students can have them and it can also take the burden off of students for having to take notes and just be able to listen. This week I'm not required to take notes. I'm going to relax and just listen. And then sometimes creating a back channel or letting students slack to sort of pose questions and sort of help one another along the way just like chat here. All those things can be helpful. One other approach that can be useful is something called the method and this is if you have a source that conversational in nature or you are dividing students in a large course into small groups and you want to see who contributed what the map is a way of seeing who contributed what. If you create a diagram and you put your students names around a table and you do a diagram. This person did this and then this person responded. It basically creates a web of the conversation and allows you to see who is participating in the conversation and who isn't and that can be useful now as students may not be participating for full range of reasons. They may feel overwhelmed or may not be able to access the technology or understand what you are asking them so having these strategies for tracking a conversation can be effective for letting you really understand who is engaged and who is not. At the collective level but also individually who is engaging at all. So if you just want a strategy for using mapping I tried this out and I created a rudimentary map myself. I imagined I had seven students and created a key for marking student contributions online and this can be shared with students so they can self-assess. You can have a key around good reframing or a key around interruptions if you wanted to have keys for not good ways of contributing and I used one note to create a map and it's a good technology from an accessible perspective too. It allows you to create a map and create keys for each person if created in your map. And then you could share these maps out and students will be responsibility for conversations filled with time. Make them aware through a medium like this of how we're participating in this move to remote learning. It can be powerful for helping them take ownership over the quality of course and collaboration. Keep adding questions in the chat. And I think in the interest of time I'll just move here quickly to this last layer of independent and then just spend a minute or two with our Q&A but what are some things we need to do around building those habits and behaviors that help students even in this time persist when learning is really challenging for people related to the learning and some related to the global situation we're in which is hard for everyone? One of the things that's important is self-regulation so that capacity to regulate our emotions so we can marshal our cognitive resources to learn and our cognitive function, planning so you can be strategic those need to be addressed for teaching and learning and one called executive functioning and online environments in UDL on campus. It's worth looking at. There's good strategies. Consistency is important. If you are doing a weekly webinar is it always at the same time? Is the login information always in the same place? Do students know the first ten minutes is going to go like this and the next thirty like this? The more you can create structure and consistency the easier it is for student to calibrate and plan.
Strategies and supports around how to support that planning, goal setting, organization using online environments is an example here tied to learning management system but these principles can be extracted for others. And then another thing to really spend time thinking about is what strategies do you use to make problem-solving visible because it's probably not going to be that - - you are not going to understand all those things you are probably missing now, how they think and work through a problem. So one strategy we've sort of been exploring a little bit in our work at cast is from an interest perspective, something called a stuck station and that comes out of the playful assessment lab and their beyond rubrics tool kid, it's a free source available and they create a video recording station and this is in a physical classroom but you could do this online but students visit to talk about where they are stuck and to get strategies from other people how they've gotten unstuck and that's the kind of thing you could create, is there a place where students can come and share how there are processes of learning, where they are getting stuck, what's challenging? It doesn't need to be high tech. You could create a thread in your discussion board around confusions you are having, what problem-solving have you done, how could you help each other problem solve and all those are important inviting students into problem solve and thinking practices physical and not just the final fab five on Friday. I'll stop there. We’ve got additional time for Q&A. What thoughts and strategies do y'all have? I know this is a lot in terms of access, making learning meaningful and supporting those habits of learning but I hope we started to put good resources in front of you and Malcolm I'll turn it over to you to see if there's other thoughts or questions.

>> Sure. There are some really good questions. We'll have to do it really quickly. There were a couple questions about the connection of UDL and crystal Sacramento State put it this way. I'd like to see if there is a resource that shows the connection between quality matter standards and UDL. Standard number eight focuses an accessibility but all other standards have some form of UDL involved but it is not specifically mentioned. Any comment on that, Sam?

>> Yes. I would agree that there's alignment between quality matters and UDL and I think people are using quality matters and cross referencing it with UDL is great. They are both focused on designing effectively from a broad range of learners from the outset and I think they are certainly compatible. I don't think they are exactly the same but I think they are both pointed toward thinking about not designing for one size fits all and thinking about using best practices in the delivery of online and blended learning and for quality matters.

>> Thanks, Sam. A final question, Amy is asking, are there any student privacy issues with recording and web conference and making it available later?

>> Yes. I would say you have to check with your education technology office. There are definitely issues with -- I mean we get it all the time. You cannot take a picture of everybody in your Zoom meeting and post that. There absolutely are issues so I would check request with your technician office to start to understand what the privacy issues are and obviously getting permission to record people is essential if that is allowed at all. So very good question.
Great. Well, regretfully we seem to be out of time and we are out of time so Sam, thank you so much for joining us today. I always learn a lot when I listen to you talk so thank you so much for taking time.

My pleasure. People are welcome to follow-up with us and take a look at the resources. They are available and feel free to be in touch if we can be of help.

Thank you to all of you who joined us today and before you signoff please click on the session evaluation link that’s going to be appearing on the screen. Your comments are important to us and if you could do it now while the session is still fresh in your mind all to the better so thank you very much for doing that. This session’s recording and presentations slides will be posted to the event site later today. Please feel free to share those resources with your colleagues. As always many thanks to our first rate production team, Jody, thank you for what you do to make this event successful and join us for the next EDUCAUSE webinar April 23rd and the topic will be budget fundamentals for the first time manager. On behalf of EDUCAUSE this is Malcolm Brown. Thank you so much for joining us today and have a great rest of your week.

End of Webinar