Project Completed by:

EDUCAUSE
Teaching, Learning, and Student Success:
2020 in Retrospect and 2021 in Prospect
Tuesday, December 1, 2020
1:00PM – 2:00PM Eastern
KATHE PELLETIER: Mobile devices. Gaming, pedagogy, scholarly communication, forecasting, future of academia. Kimberly Arnold was an evaluation consultant lead for analytics for University of Wisconsin Madison her research interests include analytics, data mining, evaluation of education impact of technology, and assessment of learning outcomes. And as Georgia State University's first chief in a minute fill GSU's exploration of new ideas for teaching and learning. Two decades of technology and developmental and across industries to foster the growth of new technologies, encourage entrepreneurship, and grow educational opportunity. Finally, we have Alexei Wesley who in the associate director of research and policy in [Name] in higher education. In this role, she supports research and authors scholarship relating to student success. Prior to joining in federal post-secondary educational policy and institutional finance.

Thank you all for joining us today with that lens began. We have a brief visual to show you let me pull up my own version here. To frame this conversation today as the panelist came together to start the reflections of 2020 and anticipating what 2021 may have in store for us. They naturally hit on four themes. We saw the re-visioning of student success. With really a greater understanding of the student as a whole person. Not just what is happening in the classroom. We saw a theme of digital transformation come through. Which included a more extensive use of the digital environment. Another theme was going beyond the digital environment to the actual transformation of the teaching and learning process. Finally, we saw the exacerbated equity issues that arose as schools went to remote learning. So, before we dive into the panelist. I would love to hear your reactions in the chat. Tell me what you think of these themes. What are your reactions did you what you're thinking of 2021? Feel free to enter those into the chat. As you are adding those we will turn to our panel. We are going to kick off the comments with Alexa who is going to start us off with some thoughts on revisiting student success and the nonacademic changes we are seeing.

ALEXA WESLEY: Sure. Well, thank you so much for having me today on the solar panel. I am looking to today's discussion. So, I think I've revisiting student success, and how this played out in 2020. One focus area has really been supporting students' well-being and serving them in a fulsome way during this intense time of uncertainty, isolation, and stress. A question that is not new but has been particularly emphasized around this is how students can impact through student success both as to the extent students are surviving college and completing grade which is a critical measure. Also prioritizing measuring student success by to the extent to which they are thriving. Engaging with others, gaining practical and skills. Having all aspects of the skills met.
Financial, academic, social, mental, and spiritual. We are seeing schools being innovative and collaborative and boarding student success. In this way. In faculty, in particular, are taking on a front facing role then they were in terms of proactively taking on students. Attending to their social and emotional needs connecting them with those available resources on campus. I think we're looking forward we will continue to see and focus on students and how to be highly collaborative in order to do so. When students return to campus. They will be looking for those types of support either from institution or their peers in the community in general. Without I will look to my panelist to weigh in on their thoughts.

>> KIMBERLY ARNOLD: Wheel won't all go for once. Thank you, Alexis, for teeing that up. One of the things I think has been prevalent in my experience in 2020. Is the shift to supporting students more holistically? The holistic being of a student it is something my entire professional has been on the teaching and learning side very focused on pedagogy, classroom practice. One of the things we often do in the analytic space is trying to focus on the classroom and the learning process. So as to not have to address some of the big scary issues around privacy when going out into more holistic elements of the student experience. I think the pandemic especially, has really highlighted the need for us as educators to take a step back. To say how can we consider, now we support more holistically, the students in our institution. There is a lot of questions around that. Especially because of the data we are gathering. The processes we have as institutions in place around that. Establishing governance and paradigms for how we can ethically use that to support our students in ways that make people feel safe and supported rather than big brother.

>> PHIL VENTIMIGLIA: Chat onto that. We have been early adopters at Georgia State University. Predictive analytics with student success in using them just for a long time. It is technologically driven. We want to go and do we even ever anticipated in Kim's eye. We look at the whole student. Everything from mental health issues to accessibility. Go and rethink things a lot of processes are self-face-to-face. I mentioned mental health having a go. Transitioning all of our counseling to videoconferencing. Do that very, very quickly. As you'd expect, even higher demand on the services. The good news is many cases that has worked really well. The biggest issue which has a good news story is that we see an infinite demand to any digital command we see and having them interact with the University and try to improve the student experience. Every tripod, every live chat. Videoconferencing can I see headshaking. They all immediately have huge numbers as soon as we turn them on. Scratch your head and say where do students go before, they had that live chat service, for example. That is good news. We are learning how to go and provide more channels for the students to really interact and be successful.

>> BRYAN ALEXANDER: I wanted to chime in. This is a crucial point. I am glad that Alexa mention this. Shout out to Alexa for having the world most popular name. In the technology world, pitch is a sister named Siri. Annamarie Young is a key aspect of us. We are pretty good at focusing on the academic access to student success. The harder one is the co-curricular act aspect. How do we reproduce digitally or for face-to-face campus that is under social distancing and so on? How do we produce the housing experience? The serendipitous conversations in the
hallway. Fraternity experience, and so on. That is a huge chunk of campus life. Especially for residential campuses and residential students. That is a real challenge. Annamarie says yes this is the biggest issue we have experienced. I want to put that out there, as well.

>> KIMBERLY ARNOLD: One of the other things as might fellow panelists were talking up. There rose to the top of my mind. The idea of more systematically leveraging the data in this really robust learning environment in which a lot of people had to transition. Very quickly. As we are thinking as a student of the more holistic being not just as a learner. How we have to balance the potential benefits of analytics, machine learning, and the models that can help us how to best support the people that we support. Knowing that in a lot of cases there has to be knowledgeable human beings and know how to dissect what they're saying, think about digital literacy. Really make sure that is at the forefront of our operations of what we are doing. We have been doing that well in higher education for quite some time. I think the scale of it has really blown up. Because of coping. Because of the rapid transition from any institutions to this remote environment. So, that is the other thing that as folks are talking. They came to the top of my mind.

>> BRYAN ALEXANDER: If I could jump in for a second, I am excited to hear you mentioned literacy. I found that in the past year or so. The national conversation about various dangers of online life has underplayed the strength of individual literacy. I'm curious in your situation. What is the role for librarians, and helping build up digital literacy among students, and of course faculty as well?

>> KIMBERLY ARNOLD: Sure, I could certainly talk about that. I will be brief though so others can have a word. I think part of it is we're looking at multiple stakeholders sitting help and support around digital literacy. Instructors us we are providing data visualizations. All the times I need help understanding. We need to make sure that we mitigate any unintentional bias that may be interjected by the virtualization delay put up. Librarians are obviously some of our best eyelets in the space. They have been pushing digital literacy for ages. The election, our recent election in this country gave us some really clear examples of why the society are, knowing how to interpret what we’re seeing. Internalizing it and what is a valid source and what is not is a reliable source. Our really important things to address on. I think librarians are to be huge advocates for this going forward. I think it is important that we are looking at various stakeholder groups. So, students need his help and so do administrators. It is important that we put a focus on all those rooms.

>> KATHE PELLETIER: One thing I will add to close us up especially as we're looking into 2021. One of the things Kim I think you brought up when we were looking at or planning conversations. Students were coming into college and next year have been students of the pandemic they have experienced her last year or year and a half in high school and this emergency remote learning situation thinking about how might we best support them as they are moving into college in the next year as well. So, the next topic we have is around digital
transformation. I think Bill is going to kick us off that one.

>> PHIL VENTIMIGLIA: Thanks, Kathy. With the universities and everything that is happened, we are already under a path to patient digital transformation catchall term that use of technology draw any organization. We have seen in exhilaration as I mentioned with some of the earlier examples of digital technology being used to revisit all the processes across the University. Everything from the learning environment to student services. Two housetop and administrative services are delivered. So, the good news is that there is a lot of work to prepare for this. The challenge is to do it at a rapid scale. Exhilarating wood plan to be a multi-year effort in two months. As we were getting ready to launch some of us that were implementing red the added costs. Not only are you trying to build the airplane while it is flying. You're trying to pay for it when you have literally less people in the seats. Our budgets have been challenged to this. There is increased cost to support the new digital tools and the expansion of the tools that we have already put into place in the past. So it is been an interesting journey that we are continuing. It is exciting for where we will be on the other end. It is a transformation. Transformation will fundamentally change the way that universities look in the future. But there has been a lot of work and a lot more work to be done.

>> ALEXA WESLEY: Everything building off of your point Bill working on for limited resources. One thing that we have been seeing at NASPA is how institutions are finding that balance between human reaction in asynchronous or Self-guided to maximize effectiveness of staff time and resources, availability. As a tree is processed as a way to best reach students.

>> PHIL VENTIMIGLIA: That is a great point like so the whole synchronous versus asynchronous. Our plan when things went sideways last year. Was to go mostly asynchronous. To ensure that students could access content. If there was not any issue. In previous research and online learning as asynchronous. As preferred. We are seeing based on what is in the Commons prayer. With the out of – – asynchronous classes is not successful. It does not fulfill all the student needs. We are introducing more synchronous online classes we are seeing this new form of pedagogy, if you will. Where it is hybrid synchronous online with students in the class and sitting in a classroom sometimes outside of the classroom. A lot more work for the faculty. To the faculty's credit there. There thing we can do this. They are learning on the fly. We are scaffolding them with the resources they need. The back to that transformation it is exciting because these models will exist and make us much more robust in the future.

>> KIMBERLY ARNOLD: I will jump in since there is a will never let a goal good Lowell to go to waste. Following up on that what I think is really interesting in this really agile transformation that we found ourselves in. As you referred to, I sold and put in the chat felt this rapid shift in pedagogy. I think that is definitely been heightened over the past nine months. From an analytic lens that creates a whole slew of potential issues on the data side as well as the analytic side what we are seeing is a lot of requests. Higher education generally. A lot of requests for people to
compare classroom activity before COVID-19. Pre-March. Then, after. I beat this drama a lot there is a lot of ethical considerations to bring in their host institutions do not have the degree sources in place to really ensure super high pathological – when you have to shift to root emergency remote learning in a matter of days or weeks for most institutions. For institutions like mine that are very traditional brick and mortar. There was a large amount of courses that needed to be transition quickly. So the rush to leverage a lot of new tools to leverage them in new ways really adds a lot of context that we cannot capture appropriately and metadata. When we’re looking to do a comparison there is a lot of potentially serious data in there that we need to be really careful and thoughtful deliberate about. That goes back to here is another drama I beat a lot. Along with my fellow panelists the data literacy. You cannot request to have data from here and here and look at averages here and look at averages here. Say here is what has changed. The lack of contact is not something that we can easily capture or extract from a lot of our digital learning tools.

>> ALEXA WESLEY: I think that is a great point was contact you. Something that made me think of is looking at student engagement preferences how those differ for students who were formally in-person and virtual. How that may compare, especially for students that were fully online before. Thinking of Anatoly, I have heard that students have been more eager to engage in peer counseling virtually than they were in person. That might be because it is less intimidating to engage with a bunch of boxes and squares to resume. I'm not sure. There is an opportunity to really dive into that and unpacked the reasoning for different preferences and engagement behavior.

>> PHIL VENTIMIGLIA: To add to your point Kim. One of the challenges is high-level analytics looking at the data we have available to us we get surface level answers that really don't drill down to what the iceberg below the surface. We are having to go back and over the break take advantage of the time. Really reach out to students to really understand why certain things happen. For example, I am assuming for a lot of universities. As we saw much higher levels of withdrawal this fall than in the past. Good news was it was usually one class, not full withdrawal. We surveyed student’s technology issues was relatively low overall students had technology issues there was a higher preponderance of that would withdrawal a class. When we look at the rest of the data across the University are tech support calls were much lower than normal in a very quiet goal in terms of tech support calls. We went back and looked at the data. If there any trends that we did not see so you have this huge bucket of technology issues I have no idea what that could be it could be a whole bunch of things. We are literally looked at and said okay as a couple hundred students but call as many of them as we can and reach out and get qualitative data to get under the surface. Probably not any different than what we should have done and pulling in the election to really understand the issues because it is hard to put everyone into a category. Alexei was mentioning this. Some students really love asynchronous love the online platform the social pods is not an issue. Students that may be transferred in the did not come from a high school that was heavily technologically based and are struggling. I do think this is something that we have been talking about at Educause how we can get underneath them have
some qualitative data to help us understand what is happening with our students.

>> KATHE PELLETIER: I will take us to the next topic which gets into the teaching and learning space Brian I think you are going to start us off here.

>> BRYAN ALEXANDER: I would like to emphasize two different points here I would love to hear from people my wonderful panelists, but also all the participants that are with us today, to begin with one of the things that we are seeing is a rise in various forms of multimodal learning this is occurring a whole bunch of ways. We are seeing, for example, low density populations on campus low density really means majority online. It is interesting to devise a campus curriculum that way. With.com nation. We are seeing some interesting divides by timing, shifting campus populations based on where they are. For example, Wellesley College in New England this thing where first-year students and sophomores were on campus this fall. In the spring they were sent home. Juniors and seniors will be on campus this spring. So, they had to change that back and forth. Some campuses have created two completely different catalogs. University of Vermont for example had a catalog for only online students. One for face-to-face. We had the entire idea of triplex. Which is invention us as a high flex is really about the choice that students and faculty support of the peering face to face with poor physical classroom experience or online. The choice can't get made throughout the semester. This is of course this requires a lot of preparation. It is quite doable. We are seeing all these multiple modes happening at the same time. Even at the same campus in the same semester even within the same class. I would love to hear people's experience with this. The second thing I want to point out this is a good time to take stock of the digital tools we are using in order to promote student engagement. There is widespread sense that students will disengage by being online or will disengage kind of numbers to cause a big problem. Right now, and some of the panels have been thing. We have been talking about synchronous video like we are doing right now. This has a lot of appeal. I still was saying not doing it can really be weak. This has my ability and has all kinds of problems as well that people have mentioned in the tub. Several people have joined me in expressing the concern of digital divide. People who are atypical and they have problems with the overwhelming interface. As well as people who have issues with zoom fatigue. We are seeing innovation in the space really able to bust out there. We are seeing new tools appear like engage late. We are seeing a wide wash of development and visual proximity, visual titles, and more to come. On the flipside, we are seeing asynchronous tools becoming more important. Of course, the LMS people using other tools outside of the LMS everything from social media my colleagues have spoken about analytics I will point you to their comments. I'm not saying much in terms of gaming or game occasion being talked about. I would love to hear examples because that is definitely a tool that can be used for student engagement. One last point I would love to hear from all of you. His increased use of automation. As usual, we are using automation for two big reasons one is to save money and another is what we can do physical presence. We haven't seen this primarily through chatterbox. We may be seeing more of this. I'm curious of all these different ways of living and blended ways of engaging students. Which of these have been most effective? Someone has to answer and no one we will be heartbroken. Before Europe's array, I totally agree
with you about your comments about automation and artificial intelligence in the future of higher education. Jackpots have been the primary application chat pods correction. Early adopter there. Have been using chat pods across the listed imprints and multiple chat pods. Really it is the most as we all know as joking with Alexa and Siri. The most mature of the AI technologies. It is relatively easy to apply, even in higher education setting. Kim was mentioning this before the session started. We now have big issues in terms of assessment. How do we do digital assessment as scale? We have over 15,000 students. Our current situation assessment models especially using things like lockdown browsers which is the most horrible name ever. We sent our students to prison to take a test. The security concerns with those. The real future needs to be using artificial intelligence tools to augment a more augment the faculty in the teaching assistants rather than replacing them. Allowing them those are in development. We have not seen them mature and be as readily available as the tools that we do have in place. I do think a lot of questions I've had and discussions that had appeared. Folks from the investment community calling and saying hey we are looking at different companies. Where should we go in the investing? But there is going to be a big push to apply AI and other areas particularly in assessment. That will be needed to happen to go and deliver high-quality education as scale at a low cost.

>> BRYAN ALEXANDER: Thank you it is great to hear from Georgia State to do great groundbreaking work. The chat box below by the way. People have been there is a lot of love for storyline, harmonize, voice thread, as well as flip grid, [Name], and some love or game of vacation. Although, people have pointed out it takes a lot of time. More design with capabilities which faculty really have not really had so far so good. Glad to see all that thinking. Thank you, correction. Kate is mentioning hypothesis. Which is great to see. Before one thing to mention real quick with the game of vacation. Video gaming as a sport he sports within us part in the University and is a way for students to engage. Pretend pandemic. Gamification correction. That is one of the most easier ways to transition into an easier model. Still have student engagement participating in sports events and so on. That is something we haven't Georgia stay and a lot of universities have. So, from a standpoint in the videogame sports has been one of the things that have been very beneficial in a virtual setting. 200 true. It is funny he sports has been criticized for not having the life atmosphere of face-to-face and stucco.

>> BRYAN ALEXANDER: They can be speaking of crazy we have love here for [Name] And also some more about using disk courts. There's a whole catalog of tools here.

>> KATHE PELLETIER: I am curious of as RVR and how many folks are turning to that if it is accessible and affordable. Certainly, having equipment can be a barrier. Both panelists and our audience as well.

>> BRYAN ALEXANDER: I have been working with a huge VRXR project. The obstacles are easily one is affordability. Although the prices are coming down here not insignificant. Second, is accessible to all of the digital divide to the extent these are online. A really large one is faculty
have not had the time or necessarily the experience to prepare to use these. There is the girth of content overall drifting content which is an issue. In educational content. We don't have easy tools for making this up and it is powerful technology and for visualization. Socialization. A few different responses here. Alex points out they have a VR lab that is close to contacting [Name] Points out you have to think of virtual use and use of callable is a lot of promise. I think we are seeing some steps along the way. One of the things that we have had in place for the pandemic and we have expanded a lot of universities have done this. The use of simulcast classrooms. Using high-quality video and screens. Enabling a hybrid experience, we can have students sitting in their room. Students sitting anywhere. A new program in a business school called [Name] Which has record enrollment. So we see that as a stepping stone, in the future, as you build on the virtual reality the condition of time they have an ocular they have the option of sitting in a classroom or sitting in their living room virtually with that. We are on the path. The simultaneous classrooms with high quality video conferencing technology are relatively affordable and easy to implement. He said I think a stepping stone to the virtual reality future.

>> KATHE PELLETIER: I like the idea of stepping stone is strategically moving to the potential future and not feeling like you need to make the big leap. I was going way to touch a little bit of on the digital divide. Social justice, equity issues was a big topic that we wanted to talk about with you. Kim, I think you are going to lead us off with this one.

>> KIMBERLY ARNOLD: Again, please do as I talk about here. We engage as painless. Do please do share stories or experiences that you have from your institution. I think that we are in a very different place right now. Then we have been in the past. Social justice is really a theme. That runs through everything we have talked about today. With events in this country and across the world. Thanks, social justice has really come to the forefront of what we need to consider as educators. COVID-19 has also increased the need to do that. Some of which I have touched on earlier. The use of data and Accenture. It is important to us as panelists that we spent some time calling out the exacerbated equity gaps that we really have seen develop over the past 6 to 9 months. As can be imagined, there has been a pretty unprecedented demand for data for all kinds of ways. I think what we have seen is a trend for quite some time. Especially over the recent past. Updated indication of education and quite honestly. For AI purposes for analytics, for decision-making from administrators. Kind of across the board. Looking forward into 2021 although we need to acknowledge it will take more than a single year. Be interesting to be on this webinar next year. See where that is. There is a lot of privacy and ethical concerns. That come up in this realm. The digital divide you have heard us mention multiple times during this webinar. That is a huge concern. When we are talking about the data vacation of education. We now have to go deeper. We have to go a layer down. It is not just about access to tools, technology equipment which is still very important I don't want to downplay that. Institutions, educators we are now more systematically than ever using data to make value judgments. Some unprecedented times. In ways as I mentioned before. We simply do not have the context at our disposal. One of the things to really stop and think about here. Is that the tools and infrastructure that we are leveraging very likely has structural racism and probably exist on our legacy systems. So, it is
important for us to stop and think about systematic inequities that we might be unintentionally not claiming there is any -- work going on here. Kind of doing that. The reality we had think talked about today. Is we have this flood of tools? Students are being asked to use more digital tools than ever before. Different tools in every course. There is accessibility issues. Those we can't as institutions get our head around all of that. On the analytic side, we are continuing to use models for prediction that may have been established pre-COVID-19. Those are typically trained on years of data. We now have to stop and think what does that look like how does that maybe affect historically marginalized students if we are using models that existed before and not accounting for all this really important context. I think I can talk a lot more I think I will stop and let some of the panelists come in. Also please use the chat and give us some examples here. Nowhere you might be seeing this play out. Before I can jump in Kim. You are spot on we have to be very conscientious and careful about how do we use the data not to be making value and bias decisions we face that early in the pandemic with regard to ability and purchasing a whole bunch of notebooks and hotspots to gifted students in the digital tools. Her first response was let's look at the data to decide who needs it or not that very quickly was problematic. We said hey we do not want to we did not have a good way to go do that. In a way that would be fair and equitable we just literally put it out to students is that if you have a need click here. Click here with what your needs are. Somehow knock on wood we were lucky enough that there was balance in the students reached out with needs and the number of devices that we were able to go purchase there is that danger of trying to use the data in such a way that it defeats the purpose you may be missing someone that does have a need. There is definitely a challenge as we go through this process Steve Harvey think one thing about this topic is how being the mind can empower students to cultivate their digital community. You might be at home where there is not necessarily firming up their identity having an online engagement can be a critical outlet. Taking a mental health approach, the equity conversation. Thinking of the racial trauma that students have incurred on ground and into blackness, police violence. Institutions have knowing that they are virtual and facilitate challenge. I think there has been rising to the occasion and doing more at home modules offering new workshops the muzzle mobile app modules may be helpful if students may not be in a space that they feel is private interacting that we can work. Also facilitating conversations around topics like intersection, mental health, ways to cope with racial trauma. Has been a topic that I've been seeing, for a lot of institutions webinars and live sessions they have been helping students overall I would add that the nature of being virtual has pose challenges. It is lowered the barrier of entry is as far as engagement and Access work students that have had more options to engage in whatever is most comfortable for them. The one which does come back to the high flex idea.

>> KIMBERLY ARNOLD: Make connection there. What Shelley just said in the chat which I think is an interesting topic that we as panels have talked about the price it is not come up today. Proctoring online proctoring and how that has seen a steep increase of use of across higher education and some really massive privacy concerns there and especially when we are talking about some of the more I don't know if I want to use the word invasive. I said it out loud so I guess I will say it solutions that are out there so that raises a lot of questions about the digital
learning ecosystem how institutions educators we leverage these tools while still balancing the privacy of individuals but ensuring a quality education close to that since no one jumped in. There has been an increase I think an interest in algorithmic fairness. That we are seeing coming out of the past six months in which again historically populations that have been historically discriminated against we are seeing more and more instances in cases about proctoring is a good one so again going back to things that existed pre-COVID-19 and examining that is something we have to do and it looks like a lot of resources and this comes through a lot of hard tools especially if AI is involved.

>> KATHE PELLETIER: Great I think we have plenty of time for Q&A they've already added the question to the key chat pod Nicole will be calling them out to Pamela over a new webinar over quick talk or something continuation of discussion.

>> I want to start the question that we got a while back for Phil. Talking about how the pandemic impacted Chabad or increase the addition of tampons.

>> PHIL VENTIMIGLIA: That is a great question. We were already expanding our chat pod across the elements of the student experience as well as some new technology tampons from other service providers we expanded and accelerated some of the plans that were already had. We also added in line chat where we have live chat for registration questions. Register's office. That has been very successful as well. More complicated questions and being able to allow students to not to call in and use live chat. It has been successful. As I was mentioning earlier. We looked at basically whatever digital engagement tools we can roll out. Can we put in place? What we keep seeing is that students continue to leverage. We are a large university. With 50,000 students if you have 10 percent of the population. Chatting on a given day it is obviously a big number. Actually what I would summarize with it is saved as having that capability has allowed us to basically manage those 50,000+ students.

>> NICHOLE ARBINO: Anything from the other panelist that would like to add? All right our next question is from Michael Murphy. Excellent question about methods of assessment. When is proctoring really uses a multipart question? When does proctoring really need if you can create a test that can be answered by a simple Google search for it is a good test? Product or assessment. If so how and who should be making this push? I will open that up to anybody. Stu and I will start this is a great question and strikes very hard the philosophy and conception of teaching. It's a question that predates the Internet. Really shapes a whole range of pedagogy and assessment strategies this has come up since the early 1990s where we have said is testing an unnecessarily AI. Because it is something that does not reflect the world itself. This is not an experience we will it be able to Google something. There will be different responses to this. One response is a lot of colleges and artificial environments. We do a lot of creation of situations that we view as experimental or transitional or otherwise different from the world. The other is this is partially a disciplinary Argument. I drive for anti-teaching act insight proctoring from communities. In many ways is it easier to generate assignments than avoid the sciences. I am not
answering the question directly. I am saying these plugs into a whole series of topics that are very deep. Given the state of emergency. Stu traveled a bit on what you said there, Brian. There is a lot of higher education students. Deep-seated cold or believes about testing. Hence the demand I think for proctoring. The other thing about you may be going. It is that we see certain disciplines. Especially professional degrees. We see that there is an argument that is being made. The standards from individual certification and professional bodies really do require more high-stakes testing. I am not saying whether that is valid or not. I think that we need to reevaluate our evaluation structures and assessment structures across the board. There is again, some deep-seated cultural beliefs about this. I think we do see some splits among disciplines for that. Stu an absolute truth he's become very important. In the US, we are relatively low stakes in testing. Compared to some societies. A lot of East Asian nations are based on really deep-rooted high stakes testing beyond anything that we see in North America. Just in the time putting a link. There is a science fiction story about digital proctoring. What are the many ways we can turn to science fiction to learn more about the present?

>> NICHOLE ARBINO: Thanks, and run a related question we had to come in. More on the AI side of proctoring. But there is an issue of making headlines about the automation of proctoring which creates this big brother feeling to make students really uncomfortable. What are your thoughts on that approach to proctoring?

>> PHIL VENTIMIGLIA: I will jump in. I mentioned AI with assessment earlier. I think it is important that the AI is not the ultimate greater. AI is being used to augment the humans to be able to go to a greater trust. Using AI tools to go through a rubric. Then have that being reviewed by a faculty member to go to ultimate final assessment. Those are the type of tools that I think we need to see in the future. Not that Siri or Alexa is actually giving you your grade.

>> NICHOLE ARBINO: Thanks Bill other thoughts?

>> KIMBERLY ARNOLD: I will, specifically in proctoring to be a touch on that. There is a need for us to be more transparent about our policies again from and analytics lands which is what I do I think transparency can go a long way in helping ease this cultural fear of big brother there are not a lot of us who do that well in large part because it takes a lot of effort the data literacy we talked about before talking about needing to modernize data structure and all that rolled into one I think some of the outcry we have heard around proctoring, for example, may have been lost in institutions. We were being committed to being more transparent about our practice and just about our practices generally.

>> NICHOLE ARBINO: Think it looks like we maybe have time for one more question. The question from Christopher Payne a great deal of training has been created to help faculty effectively use asynchronous learning what kind of training should be used to synchronous tools? When taking a class on in proctoring seriously it's one of the things that I think all instructors should know. The fact that so much of the live session parts are going to be unscripted there is a
stuff that is an emergent a lot of college faculty are not supported in this we are supposed to be that of business knowledge and for us to improvise is a little unstable that is one thing. Can I also say I hate to be the historical one here it seems like faculty have to be reminded about how to teach discussion questions? Just last month I was on a panel like this. One professor at one school that I will not name insisted to me that she was required to do 3 and a half hour long zoom lectures every week. Well, blow it up. Make it into the rest of the class Oscar live lecture. That is horrendous. That is so terrible it is almost like human rights violation. She was insistent on it. I would love to learn more about that. To make advance like we have here. We have Nicole who is dedicated to going to the chatterbox. We have all our panelists who are asking questions here. We are making this interactive. I think that above all is more important than any technical training faculty should have using this. Just actually make this engaging and interactive.

>> PHIL VENTIMIGLIA: Agreed to build upon that. One of the things I think that we will see in the future. That we benefit. We can go and take-out one-way lectures. High-grade production value makes the best lecture ever. By digitizing it and having it produced really well. To Brian! Really focus on the interactive pieces be a face to face or digitally. Really get to a much better experience than we had in the past.

>> KATHE PELLETIER: I wish that we could keep going for hours. We do need to close. On the half of Educause and our speakers. I think all of you for joining us and engaging session of learning. I especially want to thank our panelists for their rich contributions as well. Please do click on the session evaluation link if you have not already. I think Heather just added it back to the chat again. Your comments are really important to us. There was a lot going on the child. If you want to come back to this. The recording and they will not be slide the recording will be posted to the event type later today. You can feel free to share their resources with your colleagues, as well. A quick plug for our next Educause webinar on December 8 on ethical decision-making during COVID-19. On the half of Educause, this is Kathy thank you so much for joining us for today's Educause webinar.