The Current State of Learning Analytics... and Where to Go from Here
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Hi, everybody. This is Susan Grajek from EDUCAUSE and I would like to welcome you to today's EDUCAUSE webinar, The Current State of Learning Analytics. This is Susan Grajek Vice President of Partnerships, Community and Research and I'll be your moderator. We're pleased to welcome today's speakers Kristen Fox and Karen Vignare. If you're tweeting, please use the hashtag #EDUCAUSEwebinar. We hope you'll join us in making this session interactive. We don't have a whole lot of slides today because Karen and Kristen and I really want to hear from you. We want to hear your advice, your questions, and your thoughts about where we should go from here. So to do that, to open the chat, click on the chat icon at the bottom of the presentation window. And you can use the chat to make comments, share resources, or ask questions of your presenters. Be sure to select "Panelists and Attendees" from the drop-down menu to engage with everyone and we encourage you to type questions in the Q&A pod throughout the webinar. If you have technical issues, select "Panelists" in the drop-down.

Now let's turn to today's presentation. It was originally greeted with enthusiasm for its potential to increase learning success, but learning analytics has been a topic of discussion for a decade. And where are we today? We're going to tell you about two research initiatives by APLU and EDUCAUSE and by Tyton Partners on the state of learning analytics, key barriers and challenges that we need to address as a field, and institutional strategies for implementation. We're delighted to be joined by Kristen Fox and Karen Vignare. She's a frequent author and presenter on digital teaching and learning in higher education. Karen Vignare is a strategic innovator within higher Tyton education. As Vice President, Karen manages a U.S. America of public research universities that is committed to improving student success and focused on enhancing teaching and learning. So thanks for joining us today. And with that, let's start.

So here's what we're going to cover. We'll be sharing some data today about the state of learning analytics, talking about the ways in which learning analytics can advance equity and offer advice on moving forward. And we want to hear your advice and your thoughts and what you think is needed to move forward as well. So don't forget those questions and comments. Learning analytics, the definition as we've been using it, is the intentional collection and analysis of student data within the learning context to understand and optimize learning. Many people distinguish between learner and learning analytics, for the purposes of the research today that we present and our conversation, we're really lumping both together. The data we share today draws on two survey efforts to understand the state of the field in learning analytics. One was conducted by Tyton Partners in collaboration with the Gates-funded every learner everywhere...
network. And the other in early 2020. Both you'll note really before the pandemic hit us.
The questions in the APLU EDUCAUSE unison survey covered infrastructure, policy, use, and ethics and availability of learning analytics to faculty and staff. The Tyton was to Specifically, to identify disparities and drive interventions to achieve academic equity. And now we'll go to the next slide. Pre-pandemic we saw persistent gaps in outcomes by race and socioeconomic status. And we're seeing evidence that the pandemic is accelerating those gaps. We're seeing that increasing numbers of students have either dropped, failed, or withdrawn from introductory courses this fall, particularly at two-year institutions, which is kind of the opposite from what you usually see in an economic recession. According to the National Student Clearinghouse research center, enrollment fell 10.1%. Across all schools, enrollment for first time students declined 13.1%, a drop that's just simply unprecedented. Current high school students who in previous years would be entering the post-secondary education pipeline are delaying that decision if not giving up altogether. The number of students with a FAFSA application for student aid during 2020 decreased 12.3% from the previous year. Poverty-affected and underrepresented minority students will be hit the hardest with about 40% of black and Latinx households reporting a student cancelled enrollment. So that sets the stage for our discussion of learning analytics and of equity. While one of the way that is we would like to frame it today is we would like to just think about a quote from Cathy O'Neil, who has written the well-known Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy. And I hope you had a chance to hear her speak. She's spoken at a number of events, including EDUCAUSE. Some decisions can unintentionally result in actions that reinforce biases and potentially exacerbate the very problem the data was designed to solve. The collection and analysis of data does present privacy and ethical challenges. However, by implementing a set of best practices that are rooted in continuous learning, data tools provide invaluable insights to assist in meeting accountability and fiduciary responsibilities to all students. Now let's look at some of the data that we have. This first slide, and if we could switch, thank you. The first slide is -- shows data from the Tyton ELE study. If you take a look at it, the dark blue line plots the percentage of respondents who believe that using student data has the potential to improve instruction and/or produce performance gaps. The dark blue dots you see are the means for the six institutional segments the Tyson ELE survey looked at. Two year versus two year, smaller versus larger institutions and public and private institutions. The brown line plots the percentage of respondents who believe their institution has defined clear goals for the use of learning analytics. And similarly, the dots represent those six segments of institutions. As you can see here, two-year institutions are more likely to believe in the potential of learning analytics and to report that their institution has clear defined goals. So the two go hand in hand. Now if we go to the next slide, the next slide provides some data from the EDUCAUSE APLU unison study. We found institutions' learning analytics is still really low. You can tell that because you see all the bars on the right-hand side, 2%, 3%, 4%? Those are the percentage of institution who is report that they have optimized some aspect of learning analytics. And so the bars are sorted in order from the most advanced aspect of learning analytics at the bottom to the least at the top. And what we can see is we're most advanced in simply having and reporting data about learners and their context. But we still largely absence is the ability of learning reports and
data to help learners, to actually put the data to use. And unless you put the data to use, you might not as well have them in the first place. Next slide is also from the APLU EDUCAUSE unison survey. And you can see here that half or more of institutions lack most of the core elements of a learning analytics program. Now let's refer back to Cathy O'Neil's quote where she said, "We've seen time and again that mathematical models can sift through data to locate people who are likely to face great challenges, whether from crime, poverty, or education." It's up to society whether to use that intelligence to reject and punish them or to reach out to them with the resources they need. So remembering that warning that it's up to society to use data to reject and punish or to help or support, it's concerning to see that very few respondents felt that external stakeholders at their institution adequately understand either the complexity, expense, or benefits of learning analytics. It's a black box to them. 83% reported their institution lacked transparent, unbiased, and effective learning analytics AI algorithms. No wonder that less than a quarter responded that stakeholders understand algorithms. On the brighter side, open standards and a learning data repository were more likely to be in place but about half of respondents still reported that their institutions lacked even those fundamentals. So let's go to the next and last slide that talks about the EDUCAUSE APLU unison data. You can see here that survey also asked respondents to what extent their institution had achieved its desire in-state and vision with regard to learning analytics. Very few, only 3% reported that they're even 80% or more on the way to achieving their vision. And 45% are 50% or less. The median was about 25% of the way.

[TECHNICAL DIFFICULTIES]

>> The more you use it, you're able to use learning analytics for the good to reach out and help. Two years lead four-year institutions and you can also see that smaller institutions seem to be somewhat ahead of larger institutions. And now I would like to turn it over to Kristen Fox from Tyton.

>> Great, thank you, Susan, for going through a lot of data very comprehensively and giving us a great foundation to build on. We see the promise, right, as Susan said. We see real promise in the use of learning analytics to close those gaps. But we also know that per the quote that's used, it's all about how we use these data and how we equip faculty, administrators, and other stakeholders across higher education to use the data and make decisions based on the data. One of the things we saw as being really important as we help institutions and other stakeholders move this work forward is the development of a set of guiding principles that can help drive action and be used at your institutions. You can find more detail about these. These have been publicly put forth and published via the every learner everywhere website, which is an authorization all of our organizations are network members of. And I'm going to go over them here today. This is especially where I would encourage -- I'm going to share kind of the rationale behind each of these strategies and some tips and specific recommendations around strategies to execute them but would absolutely encourage folks to chime in if you've got others you want to share from your institution. And there are a couple of comments that I'm seeing come in too and we'll make sure that we answer them as we move throughout. One being around our analytics told from the
LMS primarily exclusively what other systems. And I think this is -- when we talk about learning analytics, we're talking about data about the learning experience from different sources. It might be from the LMS, a course tool, student information system. And we'll talk about this a little bit when we turn to technology and infrastructure, is making sure you're bringing in relevant data sources into a centralized repository and able to render them back. We want to acknowledge that different institutions are at different stages of sophistication and from a technology and infrastructure perspective. And so, again, one of the other things you'll find on the every learner everywhere website is a self-assessment that can be used as part of this as well. So first and foremost, we convened a group of thoughtful experts across higher education institutions, associations, ethicists, and learning science experts to really come up with these guiding principles. So while my organization Tyton facilitated the process, it's a collaborative effort for recommendations for the field. There's four things we see as guiding principles that we see that you can think about and adopt at your organization. So the first is around explicitly setting and communicating goals across the institution. And making sure that equity is explicitly stated as part of those goals. One of the things that we found in our state of the field survey work is 92% of faculty and administrators say there's a lack of clarity at their institutions around why we're collecting this data, how we're using it and how we use it to benefit students, faculty, and others. And also, only 30% say that closing gaps in student learning outcomes is a stated outcome of their initiatives. That's really important. And one of the things when we looked at best practices at institutions is exactly this, right, a clear statement of why this is important, why we're doing it at our institution, that's commonly understood by everyone. So what that means is having a consistent message and call to action is really important, that enables all of the relevant stakeholders as a campus to identify and address academic outcomes and measure them whether there's disparity by student groups. It's also really important in this setting of goals to include a broad set of stakeholders. I mean faculty, administrators, students from different backgrounds, et cetera, so we're thinking about the different lived experiences of different stakeholders and taking into account different perspectives as we set out those goals. And then some specific strategies that we saw as being best practices at institutions when it comes to equity and learning outcomes, planning and implementation. And so thinking about what are some consistent course-level learning outcomes in our general education courses, in our foundational courses, which are those courses that we know can be the most significant barriers to student success right at the start of their program. And when there's multiple sections, let's make sure that we've got some data that we can look at across sections, across the student learning experience. And this is also why it's important to have those different stakeholders at the table, because it's not punitive or evaluative of the faculty per se but rather about continuous improvement in service of our goal. Working to set key goals with those stakeholders is important in making sure they're shared. In terms of equity learning outcomes, planning, in terms of implementation, it's important in what we heard is in early stages, starting your efforts in ways that you're already doing, systems you're already using, so if you're already using courseware tools and LMS building on top of those systems, if you have processes around end of term review and that type of thing, building in the interpretation of data in those processes and starting iteratively. Another important piece of goal setting is around making sure that you're setting that continuous learning culture. As you set
those goals and making sure you're evaluating them together across the institution, again doing that in a way that brings different stakeholders together and is very much solutions-oriented in its approach. In terms of the second guiding principle here around faculty administrator, student inclusion and support, this is really about ensuring that there's ongoing professional development. And so, I see a question actually. So around why is the focus here on learning analytics to promote equity and understanding it's important but there's other goals that can be achieved as well. Absolutely agree with you, there's many different. So the reason that we are focusing on equity here is because we think this is really important and this is a place where learning analytics have significant promise in making sure that all students are learning but importantly, closing some of the gaps in student learning and outcomes that we see and that Susan at the start of our presentation highlighted.

>> And Kristen, if I could just add to that, I think it's important as we think through this lens, it's not just equity for equity's sake but thinking about the complexity around student success and how our students are continuing through the pipeline. We have to begin to think of those students who are most at risk. And while there is no -- this is not a causation but there is clear information that our poverty-affected students, our black and Latinx students are more likely to be the students at risk of not succeeding in those early courses. So one of the reasons equity becomes the first principle is because we need to get students started. It's not where we end, but it's where we need to start at.

>> Kristen, sorry.

>> Yeah. And any other questions to Susan or Karen that we want to make sure I'm monitoring the chat as well.

>> We have a couple of other questions, Kristen. And we can answer them now or we can wait until the end.

>> Well, you let me know. Why don't I -- I don't think I can see them at the moment. So you let me know, Susan, if they make sense to answer now or if I can finish going through the guiding principles.

>> Yeah, I think going through the guiding principles, yeah.

>> Okay. So the second guiding principle is around ensuring there is ongoing professional development, support for stakeholders to implement, analyze, and act on data. Again here what we heard in the state of the field data is only 5% of faculty and 7% of administrators say their institutions provide robust training opportunities. We have updated some of that data as we monitor the experience during the pandemic and one of the places that we continue to find that faculty are telling us that they don't have the support or tools is the use of data to understand and adjust the learning experience for students. And so really the call to action here is around making
sure that there are a variety of resources and supports available to faculty, administrators, and advisors and students in terms of using these data and interpreting these data. A couple of key specific strategies that we see institutions doing that are particularly effective here are around making sure that there are, again, that continuous learning culture that we talked about under goal-setting and learning outcomes, making sure that faculty groups are being created that include administrators and students as well to interpret and understand what we are learning from the data and make changes accordingly. Providing support through centers for teaching and learning as courses are being designed in terms of thinking about how you will use and interpret data throughout that learning experience. And helping faculty to work across discipline communities as well to interpret data and identify actions that can be used to drive changes to teaching and learning. And last but not least, one thing that is also really important is here making sure that there’s funding, right, for initiatives that might be piloted based on learnings from data that can be used to experiment with interventions, with training, and support for various, whether it be faculty, again, administrators, staff, or students. Thirdly, one other really important piece is around establishing clearer policies beyond FERPA around institutional policies related to the use of data. And so this is a place where as we look at barriers to the use of learning data, this is what we hear from faculty and administrators around how do I make sure I’m using these data in ways that don’t reinforce bias, how do we use data in ways that are appropriate in terms of student privacy and confidentiality. 30% of faculty administrators look to policies to tell me what to do here, this is not my area of expertise. 42% say we don’t have a policy, I’m not sure what it is. That's really important. I see a question too around what are some examples where some or all of these principles have been applied. One of the things that we’re going to share shortly is a series of case studies where we’re seeing institutions apply these various practices in different ways. And so, we'll go into some greater detail there in just a moment. So this is really important, you know, in again helping institutions to make sure that they have policies clearly laid out, have policies for how data can be used and also are sharing to identify data and making it available to faculty for use in making some of these decisions. Lastly but not least, one of the really -- the fourth and also important barrier that we heard is around technology and infrastructure and ensuring that technology and the infrastructure in place and available is making it easier for faculty and stakeholders to access data. We heard from about a quarter of faculty and administrators that lack of access to data and lack of a centralized database or data lake is a barrier to accessing data and employing learning analytics at scale. One of the things that's an important call to action here is making sure at an administrative level reviewing the process for using and interpreting data to ensure that it's available, is critically important. And both from a planning perspective, ensuring that your technology capacity has been -- you're evaluating it, you're thinking about assessing needs for integration for longer-term use. And from an implementation perspective, ensuring dashboards meet near-term goals as outlined at the top is really important. Again, here, there's a lot of detail behind these on every learner everywhere website we would encourage you to look at and a self-assessment to allow you to think about where to start in terms of knowing that each institution is at a different place in terms of sophistication and enabling learning analytics at scale. So what questions for -- on that or would it be helpful to go right into our case studies?
>> I think it would be helpful to go into the case studies. Karen, would you agree? You're on mute.

>> I should have known. Yeah, I think the case studies might be helpful, but let's just keep track of the questions that we're getting as well. So amongst this varied work between -- led by Tyton and we were learning from some of the things they're doing. We're not presenting quote/unquote, a full case study because that would have taken a whole webinar but we'll give bullet points about things we think are especially important to look to your colleagues on how they're developing their capacities and capabilities to use learning analytics better. So one of our colleagues at the University of Maryland Baltimore County, John Fritz shared some great work that they're doing. And I want to say, if you want look up some of John and Jack's work, you can find it in EDUCAUSE. They have a ton of presentations that they do regularly and they are terrific at sharing. They are really trying to look very, very deeply into the analytics they're collecting and mostly back to somebody's question was where are they getting the data. A lot of this is coming directly from their LMS. They are bringing in additional data. But they really are looking at very closely how do you support faculty training around this question of what's useful data and because the idea is not to make this again a particularly difficult conversation but to actually use the data to support faculty in the role they have in ongoing instruction. And then they've had some particularly -- when we think about that, that really is the stakeholder involvement, right? So they're really trying to build stakeholder involvement. And they're also looking at outcomes, right? So they actually had a pandemic opportunity. They have been trying to reach out to students who hadn't completed. So they were looking at their analytics, learning analytics that told them there were students that hadn't completed. They made sure they reached out to those students during the pandemic and said, "Everybody is all joining us online. Why don't you take this opportunity to complete?" So I think I'm just going to stop with that. There's a lot of other things that UMBC is also doing well. But I want to make sure we have time for questions and the case studies. So I think I turn it back to Kristen now.

>> Great, yeah. And I would also encourage folks on the line to chime in with anything that you're doing at your institutions as well and to share those with the group. What I'm going to speak to, and I did see a question too from someone about where are there some successful -- is there a list of successful learning analytics projects. And I think EDUCAUSE, to Karen's point, has key studies on their site, on every learner everywhere site as well where there are good examples. And one is Rio Salado Community College and the team there and I think the WCET has also profiled their work on their website as well. But they are a -- and they've contributed too and we've got a full case study on the every learner website on this one if you want to see more. Rio Salado, two-year institution, very diverse learner population, large distance learner population, and they serve many, many learners online as well as face to face. One of the things that they wanted to do and were seeking to solve was to improve student persistence and completion and also had a focus on eliminating achievement gaps. So they built something called the dynamic assessment data display system, DADD. That was a homegrown or proprietary
system they have built on their campus. And that is capturing data on student performance. And they have tagged it to enable looking at common student outcomes across foundational and general education courses. And key to this is the enablement and gathering of data in one place across courses, across all students. It is de-identified in this instance. There's a separate advising instance not deidentified and used for intervention. But this data set is focused on enabling analysis by course, assignment, student groups, Pell eligibility, gender, is the student taking developmental education courses as well. And that allows the student course outcomes over time. And that's been really important as the institution has looked to understand where are we successful and where are we not doing as well as we want to be. There's three things I think are important and that are a takeaway from this that I want to highlight. One is -- that's critically important here has been structuring the data in a way that is enabling within the confines of privacy policies, et cetera, the review of disaggregated data by different characteristics as I mentioned before. And that's really important in setting up and thinking about this work. In addition, secondly, what the institution did really well as it relates to some of those guiding principles that I shared earlier was really make sure that they set really clear goals, right, around what we're trying to do here and gathered data to enable that, but then operationally put in place a process to review that data. So piggybacking on existing processes, right, so our term-based course review periods and stuff that's already in place, faculty, students, advisors were included as that conversation to look at the data, answer the question around why are students not performing in this psychology course in the way that we want them to, going in with hypotheses, testing those and understanding they're reflective, solutions-oriented most importantly. And the third point is there is some budget that is made available to say, based on what we're learning, based on the interventions that we're going to improve, here's budget to move those forward. So those three things are really important as you think about implementing and using learning analytics to drive change in student learning and to impact -- I think someone had a really good question about why are we just talking about equity. Well, we're not just talking about equity. We're talking about better outcomes, progression for students and for the institution.

>> So I can jump in.

>> And I think it's back to Karen to talk about the great work happening at Cal State.

>> Yeah, so I'll jump back into sort of thinking about this and the principles that Kristen talked about. There was a lot of talk about technology and infrastructure. But this was done at Cal State in the system of -- I think Cal State's CSU student success dashboard is -- and I would want to point out that Jeff Gold who is the architect -- and I'm sure Jeff would argue he had lots of support on this, is on and part of our attendees list. So it's a good possibility that Jeff might be able to also jump in at least to the chat. But the reason we were very excited about what's happening out at CSU is they're really pulling together data so that it's more transparent, right? So that people have access to data and that they can begin to use it across the board. And I think this level of transparency is critical for us in higher ed. So a lot of early work gets done without enough visualization on who might be able to use the data. So CSU went on to them allow
faculty and department heads to start looking at the data to see if there weren't additional things they could do, either putting together co-curricular opportunities, starting to engineer learning communities within their class. In order to improve outcomes. And I think what they're beginning to see is, if you do this across a system, you begin to equalize each institution's ability to do work. And we're not saying that institutions shouldn't also think about this, but we are seeing that it's important for systems to actually lead the way in helping with this discussion as well. And if Jeff wants to pipe in in terms of the chat, I would welcome that. And they have a couple of documents on their website. And I think we're going to actually put up a resource later on that they've already shared with us. So I just want to go back to sort of summarizing. This is about the tech and infrastructure, but it's very clearly helping build those improved learning outcomes and focused on equitable outcomes at the same time. So I'll let Kristen go or wait and see if we have any questions. Questions?

>> We do have a lot of questions. So should I pose them to us now? Ready for them?

>> Why don't I share our last case study from the University of Texas at Arlington? And I think Justin Dellinger is joining us as well. The University of Texas at Arlington and we'll have plenty time for questions, I promise. Institution serving a significant volume of in-person learners, high percentage of minority students and high percentage of Pell recipients. To a really diverse student population. And they, like many institutions, noted and wanted to focus on improving course-level outcomes in their college algebra course, which across higher education, as you all know, does not always have the highest success rate. And so really wanted to address and understand why and put in place an intervention. So working across various campus stakeholders, including the research lab on campus, the math department, as well as the center for the integration of research, teaching, and learning, they undertook a large-scale study where they made sure they had the data infrastructure in place and did a large-scale analysis over time looking at student demographics, GPAs, course assessments, and implemented some new readiness tests as well. They used readiness tests to understand where a student was at the start of the term upon entering and to then adapt the learning experience and understand mastery and where students needed more support and then do an assessment at the end of the term as well. And based on this, what they found were, by putting all of these data together and looking across, there were some factors that predicted student success that they could be aware of and make decisions on how to support students accordingly, things like prior performance in GPA, unsurprisingly, and things like prior credit hours achieved. The other things though that they learned by doing this analysis are that factors like being a black male, regardless of some of these interventions, still they were showing less positive performance in the course. And they weren't able to resolve that in this initial intervention, but it enabled them to say, "Okay, we need to figure out what's going on here because even when we're controlling for factors like GPA, we still have something going on in the way we designed the curriculum and the way students are experiencing the curriculum, we're seeing this gap persist." They continued to based on this insight evaluate and test what it means about the curriculum and how we're supporting students that were seeing this result. Two things important that I would note about this are that, one, they
wouldn't be able to identify this without the comprehensive data set with these different factors in place, and then the second being the use of the readiness tests was, especially in a gateway course, was really important in enabling the identification of where students did not have mastery or were struggling and then being able to adjust accordingly the -- in terms of being able to target the student learning and give direct feedback. And so that, again, is -- that's the story of some of the great work happening at UT Arlington. And Justin, if you're on the line, feel free to chime in with anything as well. Great.

>> I wanted to add -- and, Patsy, hi, how are you? I know we need to catch up. One of the things I think with both -- and Kristen, correct me if I'm wrong. Both the Rio Salado and University of Texas Arlington, there are more details in the Every Learner Everywhere network. With the Cal State and UMBC, UMBC is prolific and they're sharing with EDUCAUSE and others. But I don't -- I think the short answer to the question is I don't think there is one repository for this. It is still very, very much spread out across different places that are beginning to look into these things. And I think this also answers part of Cai's question, like where do we start if we are not on that path and how do we look for a successful one. And I think that's the kind of conversation we wanted to have with you, like what we're trying to do is have this conversation about where do we help the industry go next. And I think we've got a good idea from Cai right now, ladies. What do you guys think?

>> I think so, too. I think so, too. And, Justin Dellinger put in the chat, we've used on task learning.org to scale the readiness tests and tied to key objectives and allowed us to provide specific suggestions to support learners early on course algebra, college algebra courses.

>> And I just see Justin's other comment. The really important feature for us was providing key feedback early, early. One of the things we know -- I'm going to go back to Patsy because Patsy is also prolific at sharing her work along with Chuck. And one of the things that we know from a lot of their work is that if we don't get to those learners who are likely to not be successful, within the first couple of weeks, depending upon your term time, we will lose them. So one of the things that is really important in the outcomes work is how do we do this really quickly. It's not just looking at a continuous improvement process. That is sort of what we used to call the autopsy process of the previous semester. What we're trying to do is also get to in-course changes that can be made by using learning analytics.

>> And we know that we've got some folks on this webinar. John Campbell is here, or he was earlier, who had some experience with that, with that sort of thing. I know that Patsy and Chuck just published a paper in a peer reviewed journal I believe about learning analytics. Patsy, if you want to say more, we're hoping you'll write that up for EDUCAUSE, too.

>> Susan, I can actually say more on that. It's the current issues of emerges e-learning and APLU was pleased to coordinate that. We have actually another author on, at least one that I saw, Patty O Sullivan is also a member of the audience and she contributed to two of the articles there that
talk a lot about how students think about courseware in this case but it's also connected to what kind of learning analytics we can get in realtime.

>> We know that more and more -- that principles and guidelines and markers of maturity are very useful, but without case studies, without examples of people who are in the field making these changes, learning and sharing, and that's the way people learn with not just what but how, how to do this work and also what pitfalls to describe. So I think case studies are just incredibly important to help the field. Well, we've got ten more minutes. And we do have some questions. So I will provide them to all of us. I can answer the first one. So I'll take that one from Kim Arnold. And she wanted to know, is the EDUCAUSE APLU Unison survey written up anywhere. And it is written up and it's not published. So, Kim, we had done this work a year ago, as we said. And our intention was to use it to spur conversation at spring meetings of Unison and APLU and EDUCAUSE because what we really wanted to do was it to be the opening bookend and the other bookend to be advice from you all about what really still needed done to be able to advance the field. And then a little more specifically, what could APLU and Unison and EDUCAUSE do in particular to help advance the field. So any suggestions, we would more than welcome them. In addition to publishing more case studies, clearly. However, we do have a write-up of the report. And I'm happy to send that you, Kristen. And you see my email address on this final slide. Anybody else who would like a copy of that, happy to share that. So thank you. We've got some more questions. And so I'll ask them. From Jill Millenas, what college changes can help these groups after collecting the data? So what changes to the curriculum, the support services or the what can help?

>> Yeah. Well, one, so certainly one of the things -- and I'll give an example that came out in some of the case study work that we did, and I'm sure, Karen, you know of others, but the goal, right, of using these data is absolutely that, to refine and adjust instruction, support, et cetera. Another example that I would give is -- and sometimes the answer is really clear. Other times it's not, right, and requires more thinking and research. One of the places where I'll give an example of that is where we worked with an institution that was seeing some persistent gaps in student learning, the performance between different student groups in a psych course. And one of the things that they found was, despite various interventions, additional tutoring and things like that, they found that again in this case black male students, even though they were actually getting better grades so, they were able to get the grades up and they were able to get the assessment measures up in the course and seeing equal performance, but if we look at a different outcome, the withdrawal rate, more black males withdraw from the course even though they were passing. What's causing that? You solved one problem but there's another one. You see students take the time to have a passing grade and get to a certain point but not continue. What that then the institution said was, "What's going on with our curriculum or examples we're using that's creating this? So let's look at that and make sure that we're again thinking about both of those outcomes measures as well. That's an example I would provide that stuck with me and I thought was interesting. And Karen, if you've got one, please feel free to share.
>> Anything? I'll move on to the next question if you would like. Great. So Laura [indiscernible] and Cai both had questions that may have been answered at least in part with the case studies. But Laura wanted to know what examples can we cite or some or all of these principles, learning analytics principles have been applied successfully. And Cai wanted to know for an institution not fully aware of learning analytics, they would like to find a list of proven and successful learning analytics projects that they can possibly duplicate as a start. So any suggestions?

>> Well, I think both for Laura and Cai, we tried to do a little bit of that and we recognize it's only a little bit, right? So the case studies that both Kristen and I presented and that you will find Susan -- I think Susan and maybe Jodie put it into the chat, some resources on the EDUCAUSE site and then of course we also have resources on the Every Learner Everywhere site as well, are places that you can get started. But there was also in the chat, in case you didn't notice it, that the learning analytics, the solar conference is virtual and you can sign up for that. Justin Dellinger, who was part of the University of Texas Arlington work, is also a chair on that. I would say Justin is a great source for also trying to find additional work. But I kind of say, one of the things we wanted to learn from you in these kinds of questions from Laura and Cai, are where do we go next, right? And it seems like there is a real opportunity to start thinking about where people are in their use of learning analytics and actually organize case studies or application of process for them. So we'll be thinking about that. So we thank you for those kinds of questions. And if Kristen or Susan want to add anything, please do.

>> Kristen, feel free.

>> I think those are all great resources that I would just echo. I think you got it, Karen.

>> And then I'll just also note, Carrie Brown just posted in the chat, IMS Global is launching several initiatives around the technical infrastructure component to try to help advance the entire field with consistent and easier data collection from across the digital ecosystem for learning analytics and they're working with a number of groups. So please do. IMS Global is just a great resource for these kinds of things. Stephen Winkelman noted he started by noticing that areas such as the tutoring center and campus were collecting data but in soloed systems and this is just a common problem at institutions. And then slowly they were migrated to a common backend database. He's thinking the data lake where they could look at data across all the student touch points. And for Stephen was the pivot to realize we were already collecting the data. If you look back at the data we were reporting, it resonates. And having the data but not using it, it's no better than not having the data. Okay. [Indiscernible] wants to know what kind of data are we tracking with Zoom.

>> Hi, Anne. You would ask a great question, since we've all been on Zoom way too much in the last year. I think that we don't have good things, but I would say, and many of you probably are aware of this, being on this call, that there are some new platforms and new tools coming along that's going to help. I mean, I've had the privilege of seeing the Engagely platform that is not
Zoom but it is capturing data like Zoom does for virtual meetings. So I think people are starting to thinking about this, particularly as we come out of the pandemic. We all recognize that there will be probably more use of virtual and digital tools as a continuing basis. So I think, Anne, we have to unfortunately say we'll learn more, come back in, I don't know, a couple of months.

>> And I think this is where Carrie, the initiatives that you and the other folks at IMS Global are heading around some of the technical infrastructure components here are really important. And one of the things that we do here, right, that can be a challenge is the accessibility of data from these disparate tools. So in theory, and Stephen, as you said, right, it's about bringing together these different forms of data into a data lake and integrated source that are accessible. The other thing I would also just say is there is -- start by looking at what you've got available, what you have, and think about the crawl, walk, run efforts at your institution as well.

>> And I think that gives a start to answering Alex's question. We are at time. And so it's time for me to read the exit script. On behalf of EDUCAUSE and our speakers, and I thank you all of us for coming for just a great conversation. Thank you, thank you for all the questions and comments and resources. Before you sign off, please do click on the session evaluation link you'll find in the chat window. Your comments are really important. The recording and presentation slides will be posted to our website and please feel free to share these results with your colleagues. And finally join us for the next webinar on January 28th to hear about the "The Rise of the Chief Privacy Officer in Higher Ed". So thanks for joining us and thanks very much.

>> Thank you, Susan. Thanks, EDUCAUSE team. Bye, Kristen, see you soon.

>> Bye, thank you everybody.