Daisy: Hi. This is Daisy Gonzales, Deputy Chancellor of the California Community Colleges Chancellor's Office, and you're listening to another episode of the California Community Colleges Chancellor's Office podcast. Today, I am joined by two distinguished experts in data and transformational change. Dr. Sonya Christian. Hi, Sonya.

Sonya: Hi, Daisy.

Daisy: And Dr. John Hetts. Hi, John.

John: Hi, Daisy.

Daisy: Before we get started, I want to share a little bit about their background. Dr. Sonya Christian became the 10th president of Bakersfield College in 2013. Under her leadership, the college has focused on improving student achievement and learning by engaging faculty and the community. Dr. Christian was a math faculty prior to moving into the administrative ranks of dean, vice president, and now president. By making data and information available, Dr. Christian has cultivated campus-wide ownership to advance the college's mission. In 2016, Dr. Christian was named "Woman of the Year" by the California State Assembly member Rudy Salas, for her accomplishments at Bakersfield College. And, she currently serves as the Vice Chair and Commissioner on the Accredited Commission for Community and Junior Colleges, ACCJC.

Dr. John Hetts is currently serving as the visiting executive for research and data with the California Community Colleges Chancellor's Office, and is the Senior Director of Data Science at Educational Results Partnership, which helps run Cal-PASS Plus, the voluntary statewide intersegmental system of educational data for the state of California. Building on 20 years of experience in instruction and research in higher education, his work focuses on identifying untapped student potential in educational data. His collaborative work on predictive modeling of student placement and performance in foundational courses won the 2012 RP Group Best College Research Award, and the 2014 ACCCA Mertes Award, when he was serving as Director of Institutional Research at Long Beach City College.

Thank you both of you for joining us today. Today's discussion is "building a data culture for student success." And, I have some key questions, five specifically. And, we'll start with an easy one. So, let's start off by talking about the Vision for Success, and what we actually mean by a data culture. So, the Vision for Success asks us to design with students in mind, to foster the use of

data, inquiry, and innovation. But, as experts, and Sonya I'll let you go first, for our community colleges, what is a data culture?

Sonya: Well Daisy, let me start by saying that at Bakersfield College, we have primarily used data as a tool for making the invisible visible, and for also creating common understanding. So, what I mean by common understanding is, I mean, just take the words student success. How do you define student success? And, I think the work that our Chancellor, Eloy Oakley, has done with the Vision for Success has been wonderful in defining a focus for the entire system of community colleges in California. And by the way, we all know, it's the largest system in the United States for higher education. At BC though, when we started our work about six years ago, we had to go through the process of defining what we meant by student success. Because, if you look at our institutional documents from the past, student success often had a variety of different meanings. If you talked to the counseling department, you would have data metrics that talked about student to counselor ratio, and other process metrics. So, it took some work for us to come up with a common definition and a common metric for what we meant by student success, which now at BC is student learning and student completion.

And for this conversation, let me focus on student completion. So, there's just one thing, at BC when we talk student success, we talk about students completing a program of study, a degree or a certificate. And then, we go on to define milestones towards that one singular outcome. And, the milestones that we have at BC are very much the milestones articulated in the Vision for Success, which is being a full-time student, getting that transfer-level English and Math in the first year, and fundamentally, every step of the way having the equity agenda, which is looking at the disaggregated data for all of those momentum points towards that one singular outcome, which is the student completion outcome.

The second piece I would add to it is we have intentionally made the data visible. So, when you look at our existing systems at the campus, our governance systems, we have reports from our meta-majors that constantly present on those metrics for student success, which is now adopted for all of the community colleges.

And finally, I will conclude by saying that, at BC for example six years ago, just like any academic institution, the minute you throw out data, what happens? Academics start quibbling and worrying about, is the data accurate. Well, if you did these assumptions, wouldn't you get a different number? But, we shifted our conversation about six years ago, saying, "Look, we're using data to really be a catalyst for improvement." So, if for example the data, and at

BC our data numbers were really low at that time, we had about 3% of our African American student population completing transfer-level Math. And so, when folks would start quibbling, "Is 3% right? Shouldn't it be like 5.2%?" It was like, "Look, stop. Whether it's 3% or 5% or 7%, the fact of the matter is, the numbers are appalling." It created an urgency for change. And so, we went to work on creating the practices that were essential to move the metric on that equity piece of the discussion. And I think in many ways, that is embedded, not just at Bakersfield College, but through the Vision for Success for all of the California community colleges.

Daisy: Thank you, Sonya. I like that, making data visible and using data as a catalyst for change. What about you, John? What does it mean to have a data culture at a community college?

John: It means so many things. But, at the heart what it means is the use of information and evidence in an ongoing culture of inquiry, for us to support our decision making and our deliberate iteration towards getting better, improving outcomes for our students, but also to support new research and scholarship around our work, so that we better understand the effectiveness of what we do. There are really three key elements that underlie all of that. Some of them are very basic. How do we make data and evidence readily available? And, one of the things that's important there is the reliability and accessibility of the data infrastructure that underlie all of our work. And, our Digital Innovation and Infrastructure Division has been hard at work at that for a very long time, maintaining and modernizing our data architecture, standing up a new data lake for storage of our data, and standing up a data warehouse as well, to better support data accessibility across our system. This is critical and often invisible work for most of us, but it's absolutely essential for a data culture that that work is proceeding. And, they are doing a fantastic job.

Secondly, to deliver on the promise of the architecture, we have an enormous amount of work that we have to do in order to define what that architecture is storing. And working through those definitions, what they mean, how we understand them, so that everyone agrees, is an ongoing, challenging process that we continue to work through. We have a long-standing team in our Management and Information Systems, that has been working on that for the Chancellor's Office for a very long time. And, we have added to that team a whole set of partners that work on our data science tools to help us bring together all of our metrics, all of our data element dictionaries into one coherent whole. So, that's the first two parts, getting the data stored, and then making sure that what we are storing we all understand, that it's accurate, that we agree what it means.

And then, the last part is making that available for everyone to use in a culture of inquiry. Working through the data that we have to understand where we stand, and to think about how we are going to use that to get where we hope to go. There are two typical ways that we often do that. One of those has to do with accountability and transparency, so that we are making sure that people know what's happening in our system and in our colleges. And, we have to balance that also though, with our goal for self reflection, being honest about what's happening, and being able to look at what we're doing, and change quickly when things aren't going the way that we hope. So, threading that needle can be very challenging, but it's very important that we have a data culture that allows us to do both of those things simultaneously, to protect us from the fears that data might not be used in the ways that we hope, but also to allow us to be honest, and think carefully about what the data mean about what we're doing.

Daisy: John, that's a really good transition to my second question. There are a lot of conversations at the statewide level about data accuracy, about how we store it, and more importantly, how we develop a statewide intersegmental system. You've done a lot of work with Cal-PASS Plus, so I'm going to ask you this question. Can you help us understand the data landscape? In other words, what statewide or local data systems do community colleges have access to, and how do they help us build a data culture?

John: So, I think right now one of the principle challenges that we have is we have an embarrassment of riches. We have an enormous breadth of tools that are available to colleges, and to stakeholders throughout the state. And so, the landscape is pretty enormous. We have a number of tools that have been available through the Chancellor's Office for a very long time. We have the Data Mart, which is our public-facing query-based tool, that allows colleges, and stakeholders at the colleges, and people outside the colleges, to access all of our basic system level data, to answer a wide variety of questions. We have also built a lot of additional tools over time into the Data Mart to address very specific needs, like the Basic Skills Cohort Progress Tracker, Transfer Velocity, and others. We also have things like the Salary Surfer that provides accessible information about the earnings of recent California community college graduates across our system, to help students consider what career path might be the most appealing. We have our Data on Demand system that supports all of our colleges, and the researchers specifically at the colleges, so they can have access to the same system-wide ability to look at students' performance across all of our colleges, that they may not be able to get otherwise just looking at their own data systems.

And then, we have two legacy systems that we are phasing out. We have our Student Success Scorecard, and the Institutional Effectiveness Partnership Initiative Portal, that we have used for accountability and planning purposes, that we are going to transition to the use of our Student Success Metrics. And, our Student Success Metrics is one of the new sets of tools that we have been developing over the last couple of years that live largely on the launch board, but we are working with partners to develop, maintain, and improve all of these. The Student Success Metrics are organized around student educational goals or student journeys, things like whether or not students are in adult education, or in a non-credit ESL track, engaging in a short-term career education pathway, or on a degree or transfer pathway. And then, we capture the impression of our students through the pathway that's most appropriate for them, from application, through enrollment, key milestones along the way, to completion and earnings in a career that's hopefully in their program of study. And these metrics in the Student Success Metrics form the backbone of what we as a system attend to in supporting the Vision for Success, and what we've asked colleges locally to use in their goal setting and planning, both generally and for their Student Equity and Achievement program.

And then, I feel a little bit like an infomercial here because, but wait there's more. There are still many more additional tools that are embedded in the launch board that support college goals. They are things like our California Community College Pipeline, that helps with program planning, various dashboards that support all of our different programs, the Adult Education Program, the Strong Workforce Program. There is an enormous number of tools. So, the challenge that we have is we have far more tools, and the landscape is far broader than most of us have the capacity to regularly attend to. So, one of the keys for the next few years will be to bring that large set, that landscape, into a much more manageable structure for folks. And so, at the heart of that will be the Student Success Metrics. And, wherever we can, we are going to simplify what we are providing to colleges, through an interface that is approachable, and customizable potentially for individual stakeholders, so that they can get access to the data that they need in a way that they understand.

Daisy: That is a great point, John, customizing the data to transform colleges, and for the uses that we have. I think also to meet statewide demands to bring our data to have transparency. You know, if either of you have heard me speak before, you have heard me say that I am a recovering researcher. And so, you know that I like to say that data doesn't drive change, people do. And so, we're talking today about building a data culture, very specifically, not just talking about data. And so Sonya, I want to ask you about how you've led that work at Bakersfield College. Can you give us one example of how you have used data to promote a culture, or to drive a transformational change on your campus?

Sonya: So, when I was listening to the question and listening to the word, so to transformational change, BC has about 37,000 students. We have over 1,000 employees. And, it feels like it's such a, you know, large enterprise, a large organization. And, the way that I describe the change happening at BC is by giving a visual of this network with several nodes. And, there are nodes all over connecting the people on our campus. At every node at BC, we have created a sensibility of learning at those nodes, John referred to it as a culture of inquiry, that those nodes then feel able to make micro-adjustment and changes to their work, to support the outcome of students completing their program of study. And, these micro-adjustments happening at every node creates a stable shift for the entire organization. And, I think that's kind of the secret sauce at BC in some ways. When I'm asked the question, "How did we create such large scale change in outcomes in such a short period of time, without, you know, people getting really upset, or me having to, you know, put in my resignation or something like that?" I think that's kind of the magic sauce. That is, you know, nodes of real active change and micro-adjustments leading to the large scale transformational change.

In terms of the examples, I want to give two examples, one discussing an example where it initiated a redesign. But remember, initiating a redesign is not the difficult work necessarily, when compared to sustaining the momentum. So, in terms of initiating the redesign, we made tremendous progress when we were able to disaggregate our data around the momentum points. So, when we put out the data to our campus community, you're right, it's the people that really create the change that is necessary for improvement, but the data serves as a catalyst. So, when we put out the change, our campus was so surprised that the performance of certain populations was crazy. We even looked at our placement data before the whole AB 705. And, I really think John Hetts and Craig Hayward and Terrence Willett who worked on the MMAP project, because the data of placement several levels below transfer-level English and Math was absolutely appalling. So, that showcasing and making the data visible to our campus created the sense of urgency for faculty and staff to embrace it and then create the necessary intervention. So, that's one major change that happened.

And, a second major one, just briefly, is we have created these 10 meta-majors. And around each meta-major we have created completion coaches. So, there are faculty who are completion coaches. We also have data coaches. And, data coaches have been absolutely a God-send to Bakersfield College. And, these are individuals who work with our IR office, but they are faculty and they are staff. They are not researchers. So, they are able to be embedded within the culture created around these nodes of excellence, these nodes of innovation.

And, they are able to continuously keep visible the performance of students within those meta-majors against those momentum points. And so, those redesigns that we had initiated two, three years ago, has been sustained through these coaching communities around the meta-majors.

Daisy: Thank you, Sonya. That was great. So, for my next question, I want to ask you about some of the common barriers that we face when we think about data, and using data, and developing that culture, and empowering our staff, you know, individuals at organizations to make this change. And so, I want us to really acknowledge those barriers, you know, to developing a data culture. Sometimes limited staffing, certainly, Sonya, you have mentioned professional development, data democratization. You know. Is the data visible. Is it available? Do we have the right technology? What are some of those common barriers, Sonya or John, that you have seen, and how have you navigated those?

John: So, I think the element that I'm going to identify as the most common barrier is actually not something that you'd probably expect a researcher to point out. Because, all of the technical and staffing things, those are all very real. But, I think one of the key barriers that most of us face is actually fear. Right? Fear is an exceptionally common barrier. It may be misplaced. It may be somewhat accurate. But, it's a fear of what will happen, now that we are looking more closely at the data. Is that going to mean something different for me? Is that going to mean something different for my students and their opportunities? Is that going to up-end the practices that I've gotten used to? And, sometimes it's a fear about whether or not the data might be used against me in some way. But sometimes it's a fear of finding out whether or not these things that I've been working really hard on, for a very long time, are actually working. And so, one of the things we have to do to build to a data culture, is help people feel comfortable in looking at data, going over data, to feel safe in those conversations, so that we are working together, so that we can all improve, and that's the purpose. And, reassuring people that the data is going to be used in a way to help us, rather than as a way to target particular individuals or groups, or whatever that case may be. And so, for me I think the first barrier that most colleges face, and systems face, when developing this kind of culture, is the fear of what this means.

Daisy: Yeah. Sonya, anything to add?

Sonya: Yeah. So, I would kind of categorize barriers with sort of people and culture barriers and system barriers. So, in the people barriers, for example, when I came to BC as President about six years ago, and when we looked at the results that we had for student completion and student equity, it was that the systems developed were actually designed to create the results that we got. And,

it wasn't that the limiting factors were not resources, so much as the systems. So for example, what was the biggest thing that we held up? It was course success. So, all of our reports at BC really focused on courses, and student success within courses. So, that's what faculty focused on. And, that really created sort of this traditional academic silo mentality. And, the big transition around that barrier was the redefinition to the outcomes being students actually completing their pathway to a degree or a certificate. So, once that definition was put into place, then we were able to work with faculty to make that transition happen.

And, the second piece that comes to mind is, when we talk about resources, the reality is the largest resource that we have are our human resources. So, trying to think about bringing in grants and other dollars, that's just a fraction of the resource and the people we have. So, we had to overcome the barrier of faculty and staff doing the same old traditional work that they had been doing. So an example is, if a faculty member was hired to teach Psychology 20 years ago, their focus was getting students through those Psychology courses. But, in a guided pathways environment, that Psychology faculty in a guided pathways college was now responsible for students in the entire pathway. Now all of a sudden, they were absolutely concerned about the general education requirements. What is the Math that the student needed to complete that particular program of study? So, the whole guided pathways shift was the solution there in trying to overcome the siloed approach that we had in the past.

And, I'll conclude by saying that I was so excited hearing John talking about all of the various systems that the Chancellor's Office, working in partnership with the RP Group and other organizations around the state, and how the Vision for Success is now creating kind of the unifying framework to bring all of those data metrics and systems together. And, that made me really happy, because on our campus we were able to see a lot of issues related to data integrity overcome because of the establishment of an IR office, and a certain level of confidence that is built among the faculty when you have experts sort of sharing the data.

And finally, even when you think of community colleges, I think the work that we need to take on right now are the barriers between the segments of education, K through 12, community colleges, and the universities. And I know that we have done an amazing job with lots of policies like SB 1440, to overcome the intersegmental barriers to student completion. And, I think we need to continue focusing on that.

Daisy: I think you're right. I think we need to have further conversations. And, to John's point about fear, making people feel comfortable, I do think that resonates across all of the segments and of course meet the requirements and

the expectations of our state legislature in making progress in those conversations.

Well, we have more to discuss. We are going to continue this conversation in our next episode. Thank you Sonya, thank you John, for being here. And for our listeners, thank you for listening. And stay tuned for the next edition of the California Community Colleges Chancellor's Office podcast.

Man: Be sure to join us for the next California Community Colleges podcast. This has been a California Community Colleges presentation.