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AUTOMATIC SYNC TECHNOLOGIES  
AST-CSU-EARLY START MATH FOR CREDIT

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>> EMILY: Good afternoon, and welcome to our Early Start math for credit web class. We are so glad you've joined us today. I'm Emily Magruder, director of institute for learning which is presenting this webcast in collaboration for center for advancement in instruction and quantitative reasoning which is co-directed by Fred Uey and Z-climb and academic access and inclusive excellence. So quite a collaborative team here in the chancellors office hosting along with me today is another member of that team, Claudia Pinterlucky for initiative and faculty development. Today, we've invited faculty from 3 campuses that offer mathematics and quantitative reasoning courses for credit during Early Start in 2018 to share their curricular designs and results of the first offering. For those of you who are -- I went one too far.

For those who are new to zoom, I want to explain some of the features we're going to use today. Long the top of the slide there there's some icons you should see at the bottom of your Zoom screen if you pull your cursor down and hover over the bottom. Those icons should appear. So, first of all, we like to know who's here. One of the great things about Zoom is that if you have a video connection, we can see you. That doesn't mean we know your name. So if you would click over the participants icon at the bottom your zoom Window, and then when you hover over your name, however it appears, it may appear as

initials or may have your name. If you hover over it, there's a rename feature. And we would love it if you would rename yourself if your name isn't obvious to everyone who is on here today.

I haven't looked to see if anyone is on the phone, but once we get started, I may, if you're on the phone, well, you can't chat. But we will try to find a way to name you at some point during the webcast. The second is the chat feature. Zoom makes it easier for us to have conversations with one another. As you're going to see in a moment, we have a very full schedule for today's webcast. So rather than have people just speak up as they might like to, which zoom allows us to do. We're going to ask that you use the chat feature throughout the webcast. Depending upon how many people are attending, and how many questions get lined up, we may invite you to open your mic to pose questions during the presenters -- to the presenters during each of the Q & A periods.

I'm going to provide instructions about how to do that as soon as I review our agenda. There's also a video icon at the bottom. I realized that some people might be, sorry, I did that again when I didn't mean to change my slide. Some people might be catching a late lunch. Don't want to be on camera. May not have a camera. But I'm going to encourage you, if you have a camera, to turn it on. Again, by hovering over your cursor over the icon on the bottom of the screen so presenters can have a feel for the audience, so we can feel we're having a conversation with one another. There's also a mute button there.

So, I'm going to do this as soon as I'm done. Please mute your microphone to eliminate any background noise and there is closed-captioning available today. You can click the 3 dots, which I don't have this image here. That say more and open up and you should be able to click on closed-captioning. I will place into the chat Window again. And Claudia, if you can repeat my chat from early where I included the URL for the StreamText for those who would prefer to read it streaming in a separate Window in their browser rather than at the bottom of the screen, if you put that back up there, Claudia, that would help. One thing about Zoom, you only see the chat that has occurred once you enter the room.

So as you can see, we have quite an array of mathematics quantitative reasoning from across the CSU who have agreed to present today. So in the first hour from 2 until 3:00 p.m., we're going to have three 15-minute presentations. One right

after the other where faculty from Fullerton, Stanislaus and Dominguez Hills will offer courses for early credit and Early Start 2018. And then each of those presentations will be followed by 5 minutes of Q & A. So we'll be beginning with Cherlyn converse of Fullerton who will present with mathematics of support and trio of Stanislaus, who will present on elementary foundations of mathematics and stretch format. They will also provide an overview of how they redesign several courses they offered already for credit in Early Start this past summer and we'll conclude with Matthew Jones of Dominguez Hills in statistic and stretch format and then in the final half hour, Dwight will join for a panel discussion of entry level statistics across the CSU moderated by Claudia.

So, as you can see, we have a lot to highlight. If you think of questions during the presentation, what we ask you to do is type them into the chat Window as they occur to you. And then when sure land finishes, which we're going to turn to in just a moment, then I will pull the questions in an order that makes sense for Cherlyn to answer them. And I may invite those with a mic to rephrase the question for Cherlyn. So with that, I'm going to stop sharing my screen. And I am going to turn it over to Cherlyn Converse. So you may share your screen now.

>> Okay. Can you see my screen?

>> EMILY: We can.

>> As she mentioned, I'm going to talk about what we did for our math 110 or ESM 110. ESM stands for Early Start mathematics which we ran early during the summer. Our 110 course was originally a bottleneck course. So with the redesign grant from 2014-2015, I was able to flip the 110 course and in fall 2016, I ran our first Section of the flip 110 course. And then in summer 2018, this past summer, we were able to integrate that with the math 10 S, which is our co-requisite for the 110. It is a one unit credit/no credit. Two days a week for 8 weeks. This allows the students to get the skills they need before they need them in the math 110 course as opposed to running it one day a week for the full semester.

In summer of 2018, we ran our pilot Section for the co-requisite of the ESM 10 S. And currently, we're running two Sections of the 10 S along with 8 Sections of the 110. I put here some of our passing rates that we had. I started with where we redesigned our course. And you can see we really improved our passing rates. We've got some good passing rates and orange is the summer where we ran the 10 S and we had 94.8

passing rate. Advantage of the summer class all the students in my 110 were also in my 10 S. They were linked so I had all the students in my class for the 110 and the other 110 had all the 10 S. With the summer course, or fall semester course, we have two days a week for 8 weeks keeping the 10 S material ahead of the 110 or when it is needed in the 110 course.

When designing the 10 S course, I had been teaching 110 for a while and I could see some of the students' weak areas which were areas students should know coming into college, but they did not. And, so, I just took, and I laid out the material I want to do cover in the 10 S. I laid out the first 8 weeks of the 110 and I matched it up. Order of operations. I know they need to be able to solve using calculators before they had apportionment. They needed to know averages before they had finance.

So I just lined it up. I later learned this is co-verse mapping and this allowed me to see where I needed the material so our students' needed in the 10 S before the 110. We have two exams. We have a midterm and final. And it is essential that our 110 instructors and 10 S instructors follow the same schedule calendar. The 10 S would not be covering the correct material if any of our instructors decided to deviate from the calendar. So as, as coordinator, create the calendar and all of our instructors must follow the calendar. I post the calendar online. I put it in the syllabus. I give it to the instructors. I color-code it because I like color-coding. So the students can look at this and they know anything that's Green, they have a ticket in the door. And I'll talk about that.

Yellow, there's no school that day. Gold, they know it's exam day. So they have the whole semester in the beginning if everybody is following the same calendar no matter who's course you're in. I created some online questions about 5 or 7 questions per Section for the 10 S. And the WebAssign text puts this into WebAssign creating a homework for the 10 S. Creating actual course 10 S. With the Cengage unlimited, students pay one prays for Cengage and they can have a class in history or math and it's all covered in one price. Only well, not only one reason, but I use 110 uses WebAssign so it was easier to add the questions without charging the students more money. So I created the 10 S workbook. I realized after the summer course, this become essential.

Again, I was taking the responsibility and bringing it to the students. The students must bring the workbook to class.

The pages are perforated and it has all the activities. The instructor can decide do we want to turn it and hand it in? It's a very minimal cost for the students. It's about 8 cents a page and under \$10. And in the workbook, we had things like, this is just an example of one of them. They need to be able to work with their calculators. They're given the formulas. They're given the numbers. And they just cannot get their calculators correctly.

So I have a group work page that would have like four questions similar to this. They work on it with their calculators. And they're working in groups. They're comparing to see if they're getting the same answers. And then I put up the solution page or keys up and they look at this. If they're not getting this answer, they again keep working on it and comparing with their neighbors, partners, and trying to see why didn't they get this answer? What went wrong? And, of course, I walk around the room and I'm helping them one-on-one. Then we went to group work 2.

And notice the problem gets a little bit more difficult. It's the other side of the equation. Same idea. They're working on it with their groups and they're comparing answers. I eventually put up a solution page. And at this point when somebody has it right, everybody cheers. And they're excited they finally got this in the calculator the right way. They help each other and they're excited to help each other which is what I want to see. And in this particular Section, this Section does take two days to cover.

We go back and say what's going to really happen if you had to use it in the real world? What's going to happen in the 110 class? Now the problems look like more they would in the one 10 class. And they're comparing and plugging it in their calculators. I put up the solution page and I walk around and help them until they can be successful at doing these problems. So that's the idea behind my workbook.

For the redesign of 2015, we actually changed the content of that course. And as I've mentioned, I flipped the 110. And I created the modules. Some have written activities and some have hands-on activities. I created the instructor manual that we give to all our instructors. It's actually a 5 inch notebook of detailed materials how to do everything activity that goes with every modules. I stopped at cabinet, which has manipulatives. I use lot of hands-on materials besides just the written materials and so all of our instructors have access to that. Those who are not familiar with the flipped format and

traditional format, and the traditional are lectures teacher directed.

Lectures are introduced during class time and the students have to apply the concepts at home usually alone. In the flipped format, we're student-centered, and the content is introduced at home and they have teachers to provide one-on-one assistance. If they can review the modules as many times as they want. What a flip classroom is not. Some people misunderstand the flip classroom. It is not replacing the teachers with videos and it is not an online course, and it is not students working without a structure. With the math 110, flipping for us is optional for the instructors. More each semester, more and more instructors are asking me if they can flip the 110 because they're seeing the advantages of this. The modules we have is 78 to 10 minutes. Students watch the module at home. They're introduced to the subject at home. And they do some simple examples on the module.

Creating the modules is time-consuming, I will tell you that. I will captivate. Now there's many choices out there. With my modules. I have a short 30 second I movie that introduces this is what we're going to talk about. Also this gets their attention. Captivate records for me each student how much time they spend on a module. So if I see a module and the student has spent 24 hours on it, I feel they left it running all night long and didn't do the module. If I see they spent 1 minute, I know they didn't spend time on it. I've embedded questions where they can't move on in the module unless they answer the questions. Ticket in the door called TID, there's a simple page for every single module. And the students do the page as they're watching the modules. Some of them are do the example from slide 5. This gets them to actually write the example down. They also must be watching the module to know which example is on module slide 5.

And some is your turn. And I give them an example that we want them to try on their own and they can put it on the ticket in the door. Here's an example of one of my ticket in the doors where they answer questions. They're very simple. They're one page. Notice at the bottom, I have them sign that they actually watch the full module and date it. I know they can cheat and write it down anyway. It just gives them a little more responsibility and they're more reluctant to say they watched the whole thing when they have to actually sign it. And for my instructors, I give them all the ticket in the doors.

I also give them all the ticket in the door key so we have a rubric everybody is following and we know what ticket in the door we're looking for. Here's another example of what the ticket in the door would look like. By putting the ticket in the door workbook, we didn't lose our formatting. They all look the same.

To earn any points for the day, the student must complete the ticket in the door. Students can come in and participate in my class. But if they do not do ticket in the door, they get zero for the day's activity. Ticket in the door are turned in as they walk in the room immediately. They're graded. No late ticket in the door are accepted. They must turn it in on the day it is due. At the end of the semester, there are two days where students can make up one ticket in the door on each of the two days. So they have two make ups, they were sick, they don't like their grade, any reason at all, they have two make ups. For the points for the day's group activity, some days I grade them on detail. And some days, if everybody is doing what they're supposed to, then they all get 10 points for the days activity. They don't know which ones I'm going to grade though.

Grading. Now you have to keep track of all of this. I like Excel. I use Excel a lot. And, so, what I did is, I put some conditional formatting in. Any time they get a zero on a ticket in the door such as 2.4. This person got a 0. It comes in red. It turns red. I don't do that. It just does that automatically and that way I know their activity also has to be a zero. If they don't do a ticket in the door, they get a zero F. I see a red one, under ticket in the door k then I better see a red activity right next to it. So that just helps you keep track of all the grading that goes on.

For fall 2018, I have now also created a workbook for the 110. It has all the ticket in the doors in it. In the previous semesters, we used PDF or word format in the ticket in the door and the student would say the formatting didn't hold. Or my printer didn't work. They have many reasons why they couldn't print ticket in the door. Now it's in the workbook and they're all the same and they can pull it out. The workbook has all the activity sheets for the day. Again, shifting the responsibility the students have to bring in to class.

The workbook also has a few pages that they may need. Some of them don't know what a deck of cards look like. So I put in a deck of cards. Some of them can't create the red Green possibility chart. This is just an example of what I did for the cards. A venn diagram, once they get to four circles, they

have a hard time drawing the four circles. So I give them some templates they can work on so they can do the math problems within the diagrams. Several students have come to me and told me how much they appreciate the 10 S course, those who repeated the course before.

Although they started the course going I don't know if I like the flip course. But now they enjoy the flip course. They said thank you for doing the modules and they're actually becoming thankful for the stuff we've done for them. ED source came to my course about a month ago. And in their article about the course, they quoted a student saying, "I have been struggling for years, and now I'm really happy and, finally, feel I'm going to pass." Obviously, the student has taken the course before. The math 110 and 10 S, this has given our students a chance to be real successful in their math course. Any questions?

>> EMILY: Thank you, Cherlyn. If I'm reading the chat correctly, we haven't had any questions come into the chat. But I would invite anyone who has a question for Cherlyn to put it in the chat or be bold and if you have the power to unmute yourself, pose it and we hope we don't get people overlapping. And you can click release from the slide share.

>> I'm trying to release my share. But it won't let me out.

>> EMILY: So I will pose one question here from Deborah who asked: Are you able to share your T I.D. instruments?

>> My T I.D. instruments? My ticket in the doors are just written papers. So are you talking about will I be willing to share what my tickets in the door are?

>> EMILY: Deborah, if you have a mic, feel free to click unmute.

>> Yeah. I also teach flipped classes and this has always been an issue not really knowing whether they're listening to the lecture online prior. I mean, are they really coming prepared? So something, I was thinking something along this line of kind of giving them a quick quiz just to make sure that they do this before coming. But this instrument where they get to fill in a few things, to even just answer questions like what was the video about? Something like that? What was your main point would be helpful. So if you have an existing sample, like you were showing on the screen, I think that would be helpful to me.

>> EMILY: So Cherlyn, you can think about that at the end of the presentation today if time allows, I will remind people that we have a collaboration space we set up and remind people how to get there. That's a place we could do that. There's a question I want to get to from Geri Brookfield before we turn it over to our colleagues at Stanislaus. But quick follow-up question that Claudia had related to tickets in the door, which is, let's see, it jumps around as people are busy in the chat now. Are all of the instructors invited to add tickets in the door and other worksheets?

>> The instructors that flip, I give them the manual. I give them the book with all the tickets in the door. And they're asked to use the modules and the ticket in the door. And those that are not, again, our instructors can choose. They don't have to flip. This semester, we had one not flip. So they're choose to go flip. Those that are not flipping, they're welcome to use some of the modules. And I've had persons say can I use the module from just this Section. And next semester she said can I have all the modules and flip the course? So, yes,, they're welcome to use my material, anybody who is teaching the course. Most of them who flip want them, and most who use one say give me all of them.

>> EMILY: Okay. Cherlyn, I'm going to talk about some questions about you sharing the materials. I'm going let you answer in the chat. As we ask our colleagues at Stanislaus to start sharing the screen, is your 110 course GE B4 and how many units?

>> It is 3 units. Yes, it is. And our 10 S is credit/no credit non-graduation.

>> EMILY: Does that answer your question, Geri?

>> Thank you. Yep. That's it.

>> EMILY: Thank you for the question. Jung Ha, David, and Dana. Are you able to share your screen and let us know what Stanislaus did in Early Start 2018? And then focus us in on elementary foundations of mathematics. And be sure to unmute yourselves when you're ready to begin.

>> Can you hear us okay? Hi, everyone. We appreciate the chancellors office inviting us to share our summer experiences. Even though we're assigned to sharing the one particular topic, I want to do, we all wanted to share how we continued the general math courses we invented and start implementing from the summer. So that's the proportion we made when we got the

chancellors funding. And I put some pictures on the bottom there. Everyone holding the arm together. This is presented from our math department webpage and we presented this happens to be done by all the collaborative work. So let me go through some slides here.

When we get the EO 1110. We want to take this opportunity to make something meaningful and useful for our students that we're serving at the Stanislaus University. So we try to incorporate some of our ideas from the curriculum developed together. So let us introduce to you the next slide. If you can see through the slide here, basically, we categorized the 5 math courses for the GE. We can call it the quantitative reasoning and art and music major language students who does not only taken this one as GE requirement. Other course is we are serving for the liberty arts, math major, and elementary foundation of mathematics and I'll tell you in detail in a few minutes.

And then also we have statistics course for the non-business major and statistics course combined with math together. Other one is for the S.T.E.M. major Algebra course too. And in each different courses, we assign the course coordinator under the course coordinator, we assign the different faculty members. That's the way we designed the new 10 courses for our curriculum development. From this curriculum development this summer, we offered the first part of the stretch courses. And as you can see from the screen, this was all our course outcome so far.

But since normal from the previous years, even though the rate was going down a lot, we're just being cautiously accepting this outcome. One of the final mathematics and statistics combination course, we have the 40% of the DSW rate. There was the reason. But still, we can see in watching it. And among all the course development, there's one course. So, hold on a second. Yeah. We're going to -- sorry about that. And then so, with all those course development, we are continuously data-driven research about the one with English department. We try to assess with the early math classes and we try to get some quantitative data outcome too. And since we're incorporating with the supplemented classes, we're also working with the research on those data too. For the next slide, I'm going to be introduce Dr. David Martin. This one is only one course that we did not put as the stretch courses. And then this one course is all the different background of the central work together. Here's Dr. David Martin.

>> So this is our QR course, math 1,000 for mostly non-S.T.E.M. majors as listed there. And, so, instead of stretching the course out, we have added in extra unit so that any student who is coming to our school, whether their classified as GE ready or not, they can take this course to satisfy their math requirements.

So we've added an extra unit in order for the instructors to add the background that might be missing. Instructors are asked to do more group learning, more projects and presentations as opposed to a traditional exam-driven course.

We piloted this summer as Ms. Jung Ha said, and we're able to see if those topics are going to work or not. We think the topics are successful. And, so, this semester, we're concentrating on the delivery in group settings and the projects and presentations as opposed to the exams.

And I think now I'll introduce Dana Reneau.

>> So I was the coordinator for the elementary foundation for math course. At Stanislaus state. We offer two lower division sequence for prospective elementary teachers. Math 1030 1040. And first count as GE quantitative reasoning course. For years, we only had those two courses starting in the spring. We're going to add a division course to go along with that as the liberty studies department redesign their program.

Under the previous system, the developmental exam and other classes, there were many students who were deemed prepared or eligible for GE who still didn't do well in our GE courses. Math 1030 included. When EO 1110 was first announced, math department did discuss offering core rep courses. But then when it became apparent we're going to be expected to offer credit bearing classes in the summary, we thought it was a better idea to stretch the course to two semesters rather than add on a co-requisite to existing class on the accelerated summer schedule. We have an Early Start math community campus from English and academic affairs. Extended ED. Services and so forth and they written support of using this stretch approach and English has been using the stretch model for developmental English course here. And, so, our basic approach has been to do the stretch model rather than core exit model with exception of the math liberal art class that Dr. Martin just discussed.

And, so, starting this summer, we offered two Sections of the first half of the stretch. Math 1035. Each of these courses, 1035 and 1035 are 3-unit courses. This was for students in category, placing Category 3 and 4. We're also

letting students who were continuing and had not completed their remediation yet to take the courses, because they were not eligible for the standard GE. Whereas, students in Category 1 and 2 are continuing to take the traditional standard one semester math 1030 class. And only start for destination student took our stretch courses. And any service course students were directed to a 1 unit Algebra course unit using Alex to fulfill their Early Start requirements.

Students could take the first half of the stretch course in the summer, and then complete the second half in the fall semester, which what we recommended for students who didn't take the stretch course in the summer, we're offering it first semester now in the fall. And they can complete that in the spring. The second course in the sequence is the one that actually counts for their GE quantitative reasoning requirement. And approximate the first half is a pre-requisite for the second half. So they have to complete both half for the quantitative reasoning. We had two summer sessions. Each four weeks long and we offered one Section of the math 1035 each semester. We typically try to cap our enrollment for Early Start classes at 25 students, but we had 9 in the first session, and 16 in the second session.

Since, as it was mentioned, enrollment was down quite a bit in Early Start this year, because Category 3 students were not required to take Early Start this summer. They were recommended but, you know, if it's just recommendation, it's not going to have any teeth in it.

Of the 25 students who took 1035 in the summer, 22 of them pass. And the instructor Dr. Joanne Statier who piloted the course over the summer, one of the faculty who helped design the course, she accredited this high pass rate to the small class sizes and getting to know her students. And that's the good news. 22 of the 25 passed in the summer. Unfortunately, only 8 of the 22 actually enrolled in the second semester for the fall. We're not quite sure why. We're only offering one Section in the fall. Maybe there was a scheduling conflict, but we're offering the second course again in the spring. And number of those students already have registered for that. So it will be to their advantage to take them in sequence, you know, to take right in a row but that's not what happened.

We're offering the first semester again right now. I'm teaching it. And I have 17 students. We're offering again in the spring and currently only 5 students are enrolled. So, offering stretch courses present these kind of scheduling

challenges. Especially, this year, this is the first year with the new placement categories, first year we've done stretch classes. We haven't had any history on what the enrollment is going to be like. People have some better idea next year in terms of how many Sections are offered and when to offer them and so forth.

The summer classes again met for four weeks. They were 5 days a week with basically 2 hour periods. One hour and 15 minutes. Both Sections had supplemental instructions. As we don't have a graduate program here, we were using junior and senior level math majors as SI leaders. They attended the lectures and helped with activities. Then they had independent help sessions, not independent, but coordinated help sessions outside of class. In addition to the support from the SI leaders, we had two math majors providing tutoring for all of our Early Start classes in the math library. If you look at the breakdown, this broke down naturally into focusing on whole numbers for the first half. And then integer numbers for the second half.

This class with four students that were less prepared, part of that is having weakness perhaps in mathematic skills. Arithmetic is one of the main topics of this course. The algebraic operations with whole numbers, integers, rational numbers, real numbers are part of the content of math 1030. So reviewing them, justifying the procedures is already part of the course. Expanding the course two semesters gave us additional time to devote to these topics which was helpful for students who have weaknesses in those areas. Computation with integers and fraction and so forth.

Math 1030 has always been one of those courses where it's never been enough time to do everything we like to do. I imagine, most of your classes are like that. But 1030 is one of the worse. So as instructors, we welcome the stunts to stretch it out to two semesters. Part of this course is activities for students working in groups with manipulative, 10 blocks, relationships, and so forth if those activities can be time-consuming and with limited class time, so much could be done. So stretching the course for two semesters has allowed more students to have these experiences.

For the most part, the course content has been the same for our stretch courses as it is for the standard courses that we've had before, but this is an exception, in that, this course is intended to prepare multiple subject candidates to meet the subject matter requirements and those requirements have a fair

amount of intermediate Algebra in them. The Algebra topics were not traditionally taught in this sequence, because previously, it was a pre-requisite of intermediate algebra or example of testing high enough on the SAT and so forth. And we no longer have guarantee that students have mastery of those topics. So there's an increased emphasis in Algebra in the stretch course.

In the first half of the course, we start off talking about the problem-solving, power of sequences and so forth and Algebra fits into that the problem-solving seems to be an emphasis through both course and Algebra is used in conjunction with that. At the end. We do some review of the more traditional intermediate Algebra topics like, solving linear equations and inequality, quadratic functions, linear equations and so forth that we traditionally haven't talked about in math 1030. And, again, because candidates for the multiple credential are expect to do have experience with these years.

And, so, the overall, we had a very good pass rate in the summer. Although I only have 7 students in my second semester now, they're on track to pass this course. And, therefore,, I complete their GE requirement in the first semester of their college, which is a lot of what we're aiming for. So let me pass it back to Jung Ha.

>> So now I'm coming back to wrapping up the one. So, here is the ongoing issue that we are sharing instead. We're really having a challenging time at first. Registration and enrollment for the students in the right classes. And then we also have noticed that in Category 2, a lot of math faculty gave me feedback that they have too many wide range of math background since having it. And another one is, we're very grateful we got some funding from the chancellors office but the funding is not a continuous one so, and the funding will be expiring next spring semester. So how are we going to support the continuation of the program and making a lot of effectiveness on the supplemental instruction if all this professional development? In the last one is the unknown. That we are scared and excited at the same time what we're finding out. So that's the issue we are facing. And if you have any further questions, feel free to send us any email, and we'll do our best to reply to your answers and sharing our experiences. And I'll go to the question and answers.

>> Thank you, Jung Ha, David, and Dana. I really like you ended on that note that you're scared and excited all at the same time at what you're finding out. I see two questions that came in in the chat. And the first might be easy for Dana to

answer. Which was, it was -- it was looking for an explanation about low enrollment from Deborah. She was wondering if it was a different Professor teaching the subsequent course that explains the low enrollment? Do you want to clarify how the stretch was set up? Was it the same?

>> I was wondering about that too. So we're not using a cohort model. So we're not, best going from two Section from summer to fall. So we're not having the exact same student and we didn't have the same instructor for the fall course that we did for the summer course. So that could be part of the explanation also.

>> I think everyone, those instructors who are teaching those courses as math department chair, I can say they're both very popular and great instructors. Yeah.

>> Great. And Jung Ha, I might ask that you all go ahead and stop your sharing just so that after we address the two more questions we have, then Matt will be able to take the share over. Dana, I think this is another question for you. Which is was this mandatory for the students?

>> No, the students were not required to attend the SI. For summer courses, it was optional for the instructors. Both Sections of the 1035 did use it, but, no, attendance was optional for the students.

>> EMILY: And there's -- let's see. So Mark is adding by definition, SI must be voluntary. And approximate as I understand, yes, supplemental instruction with the is what is following the model. Is that what Stanislaus use? Sometimes when they use supplemental instruction with lowercases, they're referring to something different but similar at the same time. So how did you convince students to attend a 3-unit course in the summer?

>> Well, it's my understanding that for students in category 4, it's required. And it's been that ways previously for those who have not passed the LM or not certified for GE yet. We've always had some non-compliant students who did not but for most part, most students are told you're required to take this in the summer. And that's the condition for enrolling in the fall and most of them have gone along with that. But there have been non-compliant students and we have not been strict about enforcing them. But don't tell them.

>> EMILY: All right. I want to thank all 3 of you from Stanislaus for sharing that with us. Now I'm going to turn it

over to Matt Jones at Dominguez Hills. So to do that, Dana and Jung Ha, I believe you have to relinquish the sharing. So stop share. Try hovering over the bottom. If you have full screen view in your computer, then go up to the top or hit escape. And it should pull you out of the full screen few and you can see the icon at the bottom of the screen. Thank you. And Mathew Jones, are you ready to share about -- foundations of statistics? I'll go on mute and you can take it away, Matt.

>> Are you seeing the screen now? Good. Okay, so, yes, I'm Matt Jones. I'm the math department chair here from Cal State Dominguez Hills. And I'm going to talk about foundations of statistics course. So I'm going to start and go ahead and show you -- okay. So, I have up in the gray boxes at the top, those are kind of the old pathways we had for our students coming in. So, previously, right there, it would take typically a two semester sequence that led to math 131. Math 131 is our regular GE stat course. That's what most of our non-S.T.E.M. majors take.

In the few years, we had begun piloting and incorporated a shorter path where students would take one semester with no credit leading to a GE math stat course. Or students would place higher. So the 3 rows at the bottom show how we're handling CAT 4, 3, and 2 in the current system. So math 101, that's the one I'm going to be talking about today. From there, students go into a supported G E-Stats course which is math 132. So this is a first of a two semester consequence. If you notice student comes in at Category 3, they can go to the GE math course 132. So stretch in 102, what's in first part of stat and some pre-requisite material, that leads into this course where students can pass directly into. Okay.

This is just sort of a key for people who might be looking at the slides later. So this is a list of at the top, you see our two current sort of introductory level courses for category 4 students. So math 102, foundations of status is what we're talking about today. It's a 3-unit course prior to GE B4. And they can try to take the intro to college Algebra. Ones in gray are the ones we retired that are non-credit bearing and we have a range. GE B4 courses.

Okay, so I'm going to lead off with the stat course by talking about the results first. So here's how we did the last four years with our introductory pre-GE math course. In the past, it was not for college credit. This year it was for college credit. You can see over the last few years, pass rate

kind of bounced around a bit. We had the highest pass rate this year than we had in the last few years.

You also see that we have far fewer students in there. And, so, that's a lot about, that's actually not been our freshman class, but bigger, but just in the placement of category 4, there were fewer of those students than students that were not passing in the past. So quite a number of drop from the students. And for those students, we were pretty successful. We feel like this is close to optimal pass rate.

The classes were somewhat smaller and I'm going to go into some details about what the course is about next. Okay, so here's our catalog description, sort of the big picture overview. So it's preparation for G E-Stats and lists off some of the basic ideas. A lot of the descriptive statistics and then foundational things like linear functions that we think are important for students to know going no statistics and then not intended for the science and math majors for pre-calculus or higher.

Okay. And then this is more granular view of the objectives in the course. So, again, you can see things like box plots, percents, using the coordinate plane, evaluating functions, understanding slope, and slope in context in particular, because that's so important for statistics. Some very introductory probability. Understanding bar graphs. Means and median using histogram and doing basic things with normal distribution and empirical rule. Looking at scattered plots and also computing Z scores. So I'll give you a second to look at that before I slash past that slide. Okay.

So next I'm going to talk about how this course came about and how we supported the launch. So, the inspiration, I guess and some of the raw materials for this foundation stat course are actually course that existed already in Cal State Northridge. However, Cal State Northridge had a 5 unit course that was foundational level. And we want to do run a 3-unit course. And, so, in adopting their materials or starting from their materials, we had to whittle thing down a lot. We focused on nearly statistical concepts and foundational mathematics that we thought were necessary to be successful in statistics. Okay.

And then Zooming kind of all the way down to the ground to see an actual example. So here's an example problem that students would look at. This is one where they're doing scatter plots and they're looking at regression line is already given, right? So later in the stats course, they might have to come up

with this but we'd give it to them. From the date of the line to the data and this is a question they could later on have a mathematical tool for. But at this level, we're asking them to have a conceptual understanding of what that means.

So, also the interpreting the slope part comes up in Part D. Where they're trying to understand given a slope, what does that slope mean in what context of this particular regression line in the dataset?

And that's the graph they're given to go with there.

Okay. So this is how we run our Early Start. So our Early Start is actually a legacy of a summer bridge program that pre-dates the existence of Early Start. Even, so, you know, long time ago, not very far away, we had summer bridge program that ran as a pretty intensive model for a fairly small number of students. It ramped up a lot as Early Start became a requirement for a large number of students and freshman class has grown. So we have a traditional number of students here which is essentially a full summer course. And the course ran, this one ran 6 weeks, 4 days a week. So that's Mondays through Thursdays. Students could enroll either in the morning or in the afternoon. And that also enables them to, if they want to, or, you know, depending on what year you're thinking about, it was sort of required they would also do their English if they needed it. That will be a little bit different possibly going forward, but in any case, we have a morning or afternoon course that runs 4 days a week. They spend about 2 hours a day with the instructor. And we have two additional SI meetings per week.

And you can sort of, yeah, I mean, we moved actually closer to what the proper UM case C model is. Although if we went by point by point, we would find we're not perfectly aligned yet. So for people who might be concerned about that.

The course had 11 homework assignments. 8 quizzes. 2 exams. Exam and a final. And, so, when you think about the instruction, basically everyday they're doing something, turning in an assignment, or taking a quiz, or the exam or final. The grade breakdown. So we used quizzes. That was 0%. Two exams for 40%. Homework and class work, and then the final exam. And the percentage is there.

So, in order to get ready for this course, this was very different from what we had run in the past. In the past, it had been mostly some kind Algebra course. Kind of a very minimal treatment of Algebra in the first course. We had actually been

trying already to begin to incorporate kind of pre-statistical concepts into that elementary course before. But this was a pretty different course. Really designed to be a lot more student-centered than the past. So if you were to look at the workbook for this course, it's actually written like it's a story. So these students are on a road trip, and they are being sent on a trip by their Professor. And the Professor is sort of sending them to particular landmarks, asking them to look at particular problems as they go. And, so, it's not a, you know, it's not a drill and practice kind of course at all. It's all very much designed for the students to look at the problems and do a lot of problem-solving. There is room for the instructor of course to provide some guidance. It's not unguided. But it's a lot less like a familiar math course than in the past.

So, to support doing all that, I acted as the course coordinator. Our summer Early Start instructors are a different group for the most part than our academic instructors. So they received 20 hours of professional development and course coordination meeting to help them get ready to run and actually run the course.

So we upfront had a meeting fairly early on where we explained the changes that were going on with EO 1110 and rationale for the new course we're starting how it fits and who's taking it. We used professional reading video to explain the goals and structure was and let them see what the course was supposed to look like in operation.

If then I wrote the assessment and the homework. So we used common assessments, common homework across all the Sections. And we had essentially weekly meetings during the summer to discuss progress, troubleshoot any issues, which could be anything from typos to how are we teaching this particular aspect of box plots or those kinds of things.

The course is structured as I've mentioned in the beginning, it's a 3-unit course. However, for those who are doing curriculum proposals, so we used one unit of activity and 2 units of instructions and we set some of those time aside for supplemental instruction. In addition to that, as the course was running, we have EAB, which is one of these system, add on systems that the campus has purchased that helps run early alert campaigns, where we identify instructors identify students who are struggling. In addition, we had instructors handout just small sheets of paper directly to students who were struggling. Typically when they were trying to quiz an exam, this would be attached. And it would say, you're recommended to go to campus

tutoring center. Here's where it is. Get this signed off and return it, turn it into the tutoring center. And the tutor center was able to track for us the students were getting the help they needed so we can see this were getting help. Okay.

Then just to kind of step back to an overview. Some of the things that are big deal for us out of the 2018 experience. So we had a lot fewer students placed into this category in terms of both the percent and number of freshman. They were more successful than students had been going all the way back to 2015. It was a, you know, well-supported across all the campus as a partnership. So our tutorial learning and testing center, advising and EOTE programs and then all of us here in the math department that were able to provide support to make it a success.

And a lot of support in terms of professional development for instructors that we felt led to this launch being successful for us.

Some of the challenges that we had both in the past and going forward, so we've had students who had changing category placements. And that didn't so much impact as during the summer. But for students who opted out of the summer if then showed up in the fall, we were surprised to find we were short on space for category 4 students in the fall because their categories had changed. So the count changed between when we were building the schedule and students were actually ready to take the class at the end of August. We feel like students are pretty successful with our current Early Start model with the 6 weeks of intensive and they're taking two courses if they need one or both. And we feel like it's too early to tell, because fall semester is still underway. But we feel like students are feeling challenges and taking the same course in the fall with them being less attached to the campus. They don't get the same kind of wrap around support level as before and the experience of taking four courses over 16 weeks is different than 2 over 6 weeks.

And we have some concerns about how we're going to get students to continue to show up for Early Start going into the future, because depending on how you require is not a strong enough word as strong of a word that used to be in the past. And I just want to acknowledge. First to thank the chancellors office for inviting us to speak about the course today. I have a colleague Sharon Flanagan and she's done a lot of work helping us get to this point. Chris from the testing center leads and our provost was good about supporting all the professional

development and committing to helping us make this succeed this summer. So with that, I'm done with my slides. And I'm happy to answer questions if people have them.

>> Thank you, Matt. One of your question is related to professional development and I don't think you asked it explicitly. It comes from Geri brook field if the Early Start instructors were paid for the 20 hours of professional development.

>> Yeah, the short answer is yes. We asked for and got from the provost some of the money that was directed to the campus supported us during that professional development. Going into the future, the way we structured the courses is they have this extra 310 and we're giving the workload and we ask them to work with the SI program, meet with SI, and part of them is having professional development support, having meetings during the course. So that's how we plan to support it going forward.

>> EMILY: Wow. Thank you, and Blake Buller has a question. You mentioned most of your ES instructors were not your normal AY instructors? Who were they?

>> Primarily, high school teachers who have gone through our Master's program. So they have Master's Degree in mathematics. And they're a local high school teacher and they're the ones who for a long time been the, most of our instructors come from them.

>> EMILY: Excellent. Matt, as you let go of the screen share, we're going to shift into the panel. So if people have additional questions for you, they're going to have an opportunity as we turn to the panel. So I am just now going to share my screen. And I am going to turn it over to Claudia. Be sure to unmute, Claudia.

>> Thank you. I was talking to myself for the last 30 seconds. [Laughter] Just to introduce myself for those who don't know. I'm Claudia I'm a consultant to the chancellor's office and having retired after 30 years at Cal Poly, Pomona. And as we talk to the campuses developing these courses, we found that everybody has a statistics work. Not everybody has a QR course and what they have on the pathway. But everyone has statistics course. So what we thought might be interesting for the final segment of today is to compare the way different campuses are addressing statistics. And, so, I'm pleased to reintroduce Matt Jones from Domingues Hills and deign ma Reneau and Dwight Wynne. I'm going to ask them leading questions and then ask these three to give their responses. So, Matt

described his course at Dominguez Hills. He said it was a fundamental course. It leads to a supported GE stat course. Now, Stanislaus, they have a stretch course, but when they made that course, they were committed to adjusting the speed of the lecture. Dana, could you explain the philosophy of that when you created that course?

>> Yes, thank you. For most of my classes, it's probably not just me, but when I get feedback from students at the end of the year, two typical comments are, I wish we would go slower and do more examples. Which you really can't reconcile. But stretching the courses has allowed us to do that. We are general statistics class is for the majority of the students are biology, psychology, criminal justice, sociology, and pre-nursing. And the standard course in the regular semester meets 3 lecture hours per week and a 2 hour lab for total of 4 units. We felt that doubling it with a stretch was too much making it 8 units. So we're stretching it to two 3-unit courses following spring or whenever. Each Class II hour lecture and a 2 hour lab. And, so, this allows us more time and we can go slower and we can do more examples.

The remediation is just in time when we get to whenever subjects need help on algebraic skills, we can introduce them during the time instead of having a separate course or class. Like our foundations class, we had supplemental instruction in the class. The SI leader would attend the lecture. They would also participate in the laboratory period. That's when the students have more than one-on-one experience with the instructor. And for many students, it's a lot easier to get help from a fellow student, SI instructor than the instructor. So they were more hands-on Board and someone they might be able to relate to more.

So the content was basically the same, but the stretched out over two semesters. First semester, gave the statistics, probability and large sample estimation saving hypothesis testing and small sample procedures. High school test. ANOVA. And linear regression for the second semester. This stretch also was allowed time for students to do analytical research projects at the end of the second semester as culminating experience. Some classes did that before, but many weren't under the normal schedule. So that's basically the set-up.

>> CLAUDIA: Thanks, Dana. Now at Fullerton, Dwight, you went to another direction and developed a that incorporated into Early Start. Do you feel challenged to fit a one semester course into the summertime line?

>> Not particularly. And some of that has to do with how our regular academic year course works. And the amount of time that we were given for Early Start so, our regular academic year course is a 3-unit course. It meets twice a week for 75 minutes. And our Early Start course was three days a week for two and a half hours plus an one-hour toll requisite. So looking at the time we had, we basically had the amount of time for a normal academic year course to do the same amount of material in the summer Early Start course.

What did become challenging was giving enough homework and enough examples and things like that that students would be able to go out and review on their own. A lot of our Early Start students would come in the morning, they get out at 11:45 or noon or whenever we finish for the day. They go to work. And they come home and there would not be time to actually do any decent amount of homework or review or anything like that. So the in class time was not a challenge. It was all the extra stuff outside of the classroom, that's where the challenge was.

>> CLAUDIA: Okay. Thank you. Now, all three of you have the goal of making statistics more meaningful to your students. You all talked about problem-solving and interpretation rather than computation. Matt, your course is designed for a general audience. And I know you changed the course to be more problem based. Do you feel you went too far from the statistical concepts that are traditionally in a statistics course?

>> I mean, I feel pretty comfortable with where our course is. I'm actually teaching the, this foundation stats course this fall. And sort of learning more about, you know, ways that we could improve it. The foundation of stats course runs as a coordinated course. And the subsequent one is less coordinated. Like there's a course calendar, but instructors are kind on their own. And, so, I think they're better-prepared for some instructors than others, because some will emphasize more computation aspects of stats than others. But I feel like we got it to the essential things they need and the final course. And the supported course, it really runs pretty close to the way that the unsupported one runs, just with the extra time.

>> CLAUDIA: Okay and Dwight, I know you've gone, at Fullerton, the extra step, if you're using statistical software. They're using simulation. Guru?

>> The software we're using is a Guru. It's a statistical software. It doesn't have all the extra bells if whistles like in R or SaaS or even Excel would have right now. But it does do

some very nice things where say we're talking about chi-square test. We can do chi-square test be simulation. So we can introduce all of our concepts using simulation, not talk about okay, this is how you compute a chi-square test statistics that you can look up in the table. My critical value is 7.81. Where is my test in relation to that? They actually get a sense of, well, I'm simulating so my P-value is the proportion of times I've got to test to bigger than what I've got. So that allows us to really hit the concepts while keeping some ground in the computation and not having them do it.

>> CLAUDIA: Good. Good. Now, one thing that caused some turbulence when EO 1110 was first being considered by the system and floated on the campuses was what we're going to do about Algebra and statistics? And some people thought there's essential part that had to be there. Some people said there's too much Algebra in our statistics classes. Dana, I want to start with you, your classes are taken by business majors. Did you discuss with the College of Business how they're going to review any additional Algebra courses they need after they leave your statistics course?

>> We have a separate class for statistics major and final math class. So we have two required math classes and rather than stretch them separately each seemed overkill. We combined them. And, so, finance math and statistics are combined. The finance math is very Algebra intensive. They do topics like inner programming which requires equations and so forth. So they get the Algebra review in the final math of the 3 stretch course and statistics is at the end of that. So they are getting their Algebra.

>> CLAUDIA: Good. Dwight, your students go to health science where's we've been worried about mathematical knowledge of those students. And I know you have concerns about the Algebra skills of your students, how are you responding to the concerns that cropped up this year?

>> So one thing that we've maybe kind of known for a long time, but it's really become crystallized with the support force is we're not assessing things properly. We're not, when we're asking something about a Algebra skill in the concept of statistics, we're not actually measuring whether or not they can do the skill. We're measuring whether or not they can read a set of instructions and apply correct formula. Or that they can read a problem and understand what they're supposed to be doing with it. And, so, we're not actually testing can you create a point slope form of an equation? We're testing can you take

this problem and recognize you need to do a point slope form. And, so, to a certain extent, we're getting almost entirely rid of Algebra skills and focusing even lower on pre-Algebra skill and on numeracy and how to read through a set of instructions.

>> CLAUDIA: Good. Good. I know others have been finding there's other aspects they didn't consider, the skills that students need to be successful in classes. Now, this is a new approach. And for most of our campuses, and we've all heard getting faculty onboard if new effort is a little bit like herding cats. Matt, you supported the launch of your new professional development and you talked about that, what do you see going into the future, and particularly the teachers of your fall class since you described your summer teachers are different than the fall teachers?

>> So we were kind of handling the extra duties that came with running these supported courses, which had to do with sort of reporting on students that were struggling and working with the SI program and tutoring center. We had handled that via stipend and now revising these courses, we integrated, we created the supplemental lab course in the course. And we're using some of that time with the workload to have professional development, help instructors to look at just some cross-cutting issues and also course specific issues that we think will help them sort of tackle what they really need to know and how can we help them get there given the supports we have now.

>> That's a good idea. And Dana, at Stanislaus, instructors have choices whether or not they use software or not. And what courses you have left to the instructions and stretch course that you have made?

>> Since we're not using a stretch course. And it's not a cohort model. And they have a different instructor in the first semester than the second semester. So first context is pretty well fixed by the course learning outcome and the proposal. The instructors we had in the summer for our course, unlike Matt's, these are instructors who have taught our basic statistics for years if also taught the intermediate Algebra classes for the intermediate students. So they're used to this audience and used to statistics. And, so, they had some experience with it and had a lot of autonomy on how they run things. Technology has always been somewhat of a personal choice. Some like to use the SPSS which is what the college department likes. Some people use Excel and others use graph and calculator and so forth. So the technology is more of a personal choice for the instructor. But the content is pretty well locked in by what we

need to do for what's in the course and what our requirements for servicing requires.

>> Of course notes grading and so on is up to the individual instructor?

>> For the summer, we did share a common tentative course outline of a schedule. And shared some materials like laboratory assignments and so forth. But how much the instructors used those was again, up to them.

>> Great. So, Emily, we're a little bit ahead of schedule. So just before we open it up to questions from people watching, I'll ask my 3 panelists, is there something distinctive about your course that you want to make sure people know about before we take questions from the viewers?

>> So I don't think there's anything necessarily distinctive about our course. But as part of this EO 1110, we took the opportunity to redesign the course. To really get rid of a lot of things we didn't think were fundamental or we thought we're placing too much emphasis on computational skills and not enough emphasis on conceptual skills. So our course looks like a hybrid between a traditional course and a course you might see at UCLA or Cal Poly.

>> Really, the foundations course, I mean, I know other people are launching similar kinds of courses, but I feel like ours probably has a distinct flavor in terms of how the courses run with pretty, you know, narrow focus on things that are really essential for being successful in statistics. Not a big emphasis on computational aspects. And a lot of student-driven interaction in the classroom.

>> Yeah, this idea -- this increased emphasis on active learning has been very difficult for some people.

>> Umm-hmm. Yep.

>> Dana any last words?

>> I think the most distinctive change for ours is the business sequence we're actually combining the statistics and the finale math. Because there was a simple probability and they came back to that again in the statistics and integrating the two. I'm hoping it will be effective.

>> A real intentional look at the content across multiple courses and that's been a real opportunity for you.

>> Exactly. So Emily, I will turn it back to you.

>> Well, fantastic. I want to thank all three of our panelist here and just let you know we still have 28 people logged on which was a 90 minute webcast. We had up to 36 or 38 at one point. So that's a testament to I think the richly detailed information that you all shared. I'll ask before I close with a few slides we have some information to share with you that we have logged on. But I'll ask if anybody has questions for Matt, Dana, or Dwight? And you can bold and ask your question if you like. And I should be taking a page out of the supplemental instruction playbook that wait time is really important. We have Andrew weighing in to say a big thank you to everyone. I will continue to pause while I pull up our slides one more time. Hopefully, that won't block my view of any other questions or comments that come in. I just want to share with folks that, first of all, it was really wonderful to have CSU faculty, this great array of people beginning with Cherlyn, Jung Ha, David, and Matt, and then be joined by Dwight.

We had 17 webcasts in the spring that featured, many of them featured CSU mathematics faculty. This fall, we have been doing a series which we should call more webinars. The webcast where Dana center has been hosting two-hour session that are meant to be active learning for instructors who are exploring other ways to use active learning in their classrooms. And we have one more coming up on December 7. The topic is how do we ensure rigor and fresher math courses. So one way to register is the professional development calendar. URL is at the bottom of your screen there.

We will be sending more reminders to campus for that. If you don't already get lots of emails from us, you can put your email into the chat Window. And we'll be sure to add you to it. I'm going to pause here while I leave that slide up, because Deborah has posted a question asking, saying, she's wondering about how much of growth mind set, time management activities were incorporated and successful? So, Matt, Dana, or Dwight? Did you think about -- did you incorporate growth mindset approaches or activities or time management activities into your courses?

>> So, as part of the ramp up professional development that we had, we definitely discussed growth mindset and suggested some activities. And then we put them in a shared electronic folder that our instructors could access. I don't know on the others end of it how much they were used. We left it in the instructors hands to do that part. So I don't know if

they used it, but we did definitely put it out there and we had that discussion upfront.

>> Dana or Dwight? With all that you packed into your new courses, did you consider those?

>> We don't talk directly about growth mindset or time management explicitly. The first thing of course we do talk about goal-setting. And we talk about how to make sure that we're on track to achieve those goals and we don't talk about growth and mindset but we do situate it in the attribution theory where we're trying to identify causes and with a well went and what didn't go well and is that something I can change or do over and is it due to the Professor and being able to think it through that way rather than just talking about growth mindset.

>> This is an excellent question, Deborah. I would love to know what campus you're from, if you don't mind. Right now, you're Deborah. Dana, anything on your end?

>> No, I didn't address growth mindset specifically in my set. Although the summer instructor, if she didn't do it directly, I'm sure her style of teaching, she would have basically incorporated into what she was doing over the summer.

>> Great. And thanks, Deborah, you're from Cal State L.A.. I thought there might be more than one Deborah around. If you want to look at these webcast later or share with your colleagues who weren't able to join in and I want to share again with our wonderful presenters today that there were people who said I wish I could be there. Will it be recorded? And it has been recorded. And the way you access the archive are from our calendar at the top of the calendar, there's a red button that says calendar archive. So that's the listing for today's webcast. It will get moved into the archive. And then we'll link this recording along with the slides that our presenters used. I'll merge them all into one document and I'll share them there. During Cherlyn's presentation, people wanted to share the resources she had.

And one thing Claudia suggested in the chat, we might use the CSU math collaboration site we set up and the professional development we've been doing in the last year, people kept asking for a collaboration space. And, so, Kathy Fernandez in technology space helped us. So the short URL is down there. I've shrunk the image really small. We do link the webinars in a pretty easy to use list down there. But this is a space meant for CSU faculty, for you. So if Cherlyn has been encouraged to

share things, we'll explore how to use them in this useable way and you're more than welcome to share with us how to use it.

We could add, you, as a, you know, give you special administrator privileges to the site if you have ideas how to use it. Finally, for those who were on, your campus implementation teams, we just today sent out the invitations to the contact on each campus for the face-to-face. We're doing regional events and pairs. And the opportunity to get together and reflect on the successes of the first term. Those are coming around February 1 for southern campuses in Long Beach, and February 8 in Sacramento.

So if you're on your campus team or want to be on your campus team, talk to your campus contact. If you don't know who that is, you can email me and I can tell who you that is. And, finally, I want to thank our presenters again for sharing what you did. You went boldly. You dove into offering your courses for credit in the summer. And I know there were some courses at Cal State L.A. for credit, but folks weren't available to share. We appreciate you sharing with colleagues so that they can learn from your successes and from your lessons learned. And, of course, I want to thank everyone for joining in today. Thank you for all you do to support students and the CSU. And wish you all a wonderful afternoon and a wonderful evening. So with that, I'll let people sign off. Claudia and I will stay here for a moment. I don't know about Claudia, I'll stay here in case people post last questions to the chat. Again, thank you, all.

>> Thanks, Emily

>> Thank you, Emily!

>> Thank you!

[End of webinar]