in how they've integrated formative assessment in teacher preparation at the California State University, San Jose.

They they're not actually going to talk specifically about the course,

but suffice it to say that both Caroline and I have seen videos of the

the candidate teachers during their teaching practice, and honestly, they look like veteran teachers.

They are so sophisticated in how they listen to students, how they respond to students. Brent and Carrie have

got a whole set of moves that they teach these students, and it really is a wonderful, wonderful foundation.

If I'd been in any hiring position, I would have certainly hired all your students,

Brent and Carrie.

So Brent is, he's a professor at San Jose, College of Education, in the Department of Teacher Education and the Ed Leadership program.

And he's also the Executive Director for the Center for Innovation in Applied Education Policy.

And Carrie Holmberg, she is an assistant director at the same center with Brent.

And she's a senior lecturer in the Department of Education and pre-service teacher education at San Jose State.

So I was delighted when they accepted the invitation

because I can't think of anybody better in the country to talk about formative assessment in teacher preparation.

So they're really going to help us understand the impetus for introducing formative assessment,

how they infuse formative assessment practices into courses and and how their accreditation fit or didn't fit into their work.

So delighted to have you both. Thank you so much for being here.

Oh, and by the way, I just I don't want to forget that they have co-authored a really, really, really good book on feedback.

I can't remember the title, Brent and Carrie, but it's really, really good.

So over to you and thank you again for being here. Well, thank you, Margaret, for that warm introduction.

It's wonderful to be called a trailblazer. Brent and I are just super glad to be here with the consortium and talk with you today

about formative assessment and teacher preparation at a California state university,

particularly our state university, which is San Jose State.

As Margaret said, Brent is executive director of a center.

It's the Center for Innovation in Applied Education Policy, and he's a professor there at San Jose State. And at San Jose State

I'm assistant director at the same center with a focus on assessment for deeper learning.

And I'm also a senior lecturer in the Department of Education there.

So we'll be talking today a little bit about these five topics.

Building formative assessment capacity in the teaching profession, embedding FA in core courses, embedding FA in clinical practice,

We'll talk about the TPA connection to capacity-building in institutions of higher education.

And finally, embedding FA as part of the accreditation story.

So we will say a few words about building capacity for formative assessment.

But first we're going to talk about a bit about the landscape of teacher preparation.

And so in California we prepare a lot of teachers.

And when I say "we" I mean the CSU, this state university system, nearly 49% of the most recent years' candidates have been prepared by the CSU.

If we think of that, nationally, 8% of teachers nationally are prepared by the CSU because we're a large state.

And our institution of San Jose State,

our master's degree in education program is the fifth largest out of the 23 campuses that make up the CSU system.

And so at San Jose State, embedding formative assessment in the work of teacher preparation,

it means having these three elements that you see on this table.

And on the left you see a course called EDTE 282.

It's called Assessment and Evaluation, which this course foregrounds formative assessment.

The next element is a clinical practice experience, which is supported by a course that we call 184X.

And finally, students, excuse me, engaging in the California Teacher Performance assessment or CalTPA, particularly the second cycle.

It's a two-cycle TPA. And this is how it looks from the point of view of our students who are experiencing curriculum.

And on the left side you see multiple subject candidates. And in the right-hand side you see single subject candidates.

And these are the courses that they take in the three semester sequence.

So we've highlighted in green where there is deep embedding a formative assessment in

which we call that as more than just one unit of instruction and/or a standalone course.

And we've noted in teal, the teal color, the light embedding of FA, which might look like articles on the syllabus.

So let's talk about embedding formative assessment in some core courses.

So we said sometimes we embed formative assessment into an entire standalone course.

Right. We are one of those lucky,

like earlier it was said today, right, that that there were two courses, you know, standalone in these other institutions.

And California is similar in that regard. But San Jose State in its

trailblazing way has one.

And we currently teach a course called EDTE 282, and it's built around the FA moves framework.

And so you see this colorful rainbow picture representing

the omni directionality of all the FA moves that teachers and students can enact together.

So we've been careful to align formative assessment content with our state's professional standards.

And these in California are known as TPEs or Teacher Performance Expectations.

So, such as, objectives such as that students understand and can explain the purposes of classroom assessment.

Right, that's one. Another being identifying, students can identify research-based

principles and practices that underlie formative assessment during instruction.

They can apply assessment principles to develop rubrics, scoring guides and progress indicators to support classroom learning.

And you see listed the TPEs that these are connected to, these course objectives.

And, finally, analyzing student work from the perspective of psychological theories of

learning and cognition and discussing this with their classmates and colleagues.

So in our work, a focus on language learners with formative assessment is key.

It's so important.

We need, especially in California, teachers who are prepared to plan, enact, and reflect on their practice in the context of multilingual learners.

So we wrote an article...next...

There...for Educational Leadership. You'll see an image of that in the right-hand side of that slide, which we use as a primer,

along with other research on the connections between English learners and formative assessment,

including Margaret, your article with Aida Walqui, the meaningful classroom talk piece,

which we find so good and that helps us awaken in our students

how to best meet the teacher performance expectations.

We call them TPEs one and five about supporting all learners through instruction and assessment.

On this slide,

we see three examples of real world authentic course assignments that we have our students working on over the entire semester to ensure two things:

One, that they understand the principles of FA, but two, more importantly,

that they can create and use their own tools in their classrooms when they become full time teachers, because that's the goal, right?

That they'll take these practices with them and customize them to their own settings.

This assignment we see here asks teacher candidates to plan

how their formative assessment questions, checks for understanding, and probes will align with important learning goals in a unit of instruction.

The key point is to get students thinking about learning goals and formative assessment.

And these maps that we're talking about must connect with a unit in lesson planning as

part of an integrated approach to formative assessment skills building among novices.

Much of our work with beginners is getting them to make connections between our assessment course and all the other courses that they're taking.

We also have a library of previous student work, including these formative assessment lesson plans that can help them scaffold their

learning.

So these are a few of the approaches that we take. Brent?

It's my turn now, right? Take it away.

All right. So I'm going to talk very quickly now about embedding FA in clinical practice.

Thank you, Carrie, for sort of laying out the terrain for us on the coursework.

One of the things that we see as a critical component of doing

deep formative assessment work in HEIs is to make sure that what's going on inside of foundations courses

and methods courses has some relationship to what happens in the actual student teaching experience.

And so we've been using FA capacity-building approach to look at how we can support beginning teachers on micro teaching events,

where they're ramping up to the actual full days of teaching, which for our case would be in first semester, 15 days.

In second semester, it would be an actual entire semester of teaching.

We think a lot about having peer-to-peer video analysis.

Margaret mentioned some of those videos, and we use them to sort of show each other what good practices look like for beginning teachers,

but also invite our own teachers to videotape themselves and to take a look at and deconstruct and make sense of the moves they're making.

So there's a lot of ways to do this. You can look at actual video, and we have a lot of those catalogued and available,

but we're also very interested in letting the students know that their preparation for the TPA will include video-based performance.

And in that case, we want to make sure that they have micro ramps to those experiences.

So again, we allow them to look at one-minute, three-minute,

five-minute interactions and essentially deconstruct those together and figure out what's working and what's not working.

One of the things that we're also committed to in this clinical practice phase is that

our students actually develop and design some of their own formative assessment tools.

We really want to know that when they leave our program,

they are ready to engage in designing and constructing and utilizing tools such as something we call the Progress Guide,

which we wrote about recently in the Kappan. Progress guides are a way to think about making rubrics more sensible.

for students who may not want to look at all the cognitive complexity and as Popham calls sometimes "dysfunctional detail."

So again, we allow the students to create, design, get feedback on,

and then implement those tools as part of their clinical practice and preparation for their teacher performance assessment.

Now I said something about the TPA because in California TPA, I hate to say it, is king or queen,

so we really can't pretend when we're doing formative assessment

capacity building that we're simply talking about what happens inside the building of a particular HEI.

What's going to happen is we might do lots of things at the program level,

but our candidates will be benchmarked and judged against the standard of what's called the TPA.

And we have several models in California, I don't know, in Michigan or Nebraska which ones you've adopted or whether you're not using them currently.

But in California, we have the FAST, the EdTPA and the CalTPA.

And at San Jose State we work on the CalTPA, which I mentioned in the notes

today, I helped to design with about 20 other people.

And because of that involvement, we were able to embed two cycles of instruction.

And the assessment—driven instruction, of course, paralleled very closely with our commitment to FA capacity building.

So that was a happy moment. That particular task and formal assessment, which is available in most of these TPAs,

really gives us an opportunity to think about how to link what we do in the HEI with what's going on in the licensure examination,

and to make sure that our students are well prepared for both.

So we see this as a really nice opportunity to again create integration, create possibilities, clinical practice, being united with coursework

And then that TPA cycle piece, all of these things need to move in some kind of coordination.

And that's kind of I think part of our message today.

Last but not least, when we were asked the very tough question of figuring out how this all fits into accreditation.

Well, that is a black box for many of us. I can only say this.

We have a lot of programs in California that have to be accredited.

All of these slides come from a committee that I just sat on this last year,

where the CCTC is looking at trying to figure out how to link up, for example,

its aspirations in the Teaching Performance Expectations with program and program delivery,

and then, of course, to accredit those programs which are on track.

We have plenty of programs. My concern is where is that relationship sometimes between accreditation and the TPA?

As I understand it, the commission in California is right now trying to figure out how to fine tune that a bit,

particularly because the concern has been that it's not formative enough.

There's not been enough sort of formative, continuous improvement thinking with accreditation.

And so one is trying to figure out how to back that into systems.

I'll leave it for the bigger minds to figure that out. But I will say the nexus between TPA clinical practice and coursework should be

explored, and we think of it in our program as a foundation at the bottom that does support and feed both our TPA and our accreditation moves.

We asked our folks who handle accreditation in our college a little bit about what they could say,

and we didn't get too much in terms of the specifics,

but what we will say is we know that all of these things are leading towards the teaching standards,

and those standards are at the core of how we get accredited. So last but not least, here, as we move into sort of the bigger picture, again,

we think of a lot of these things as interrelated items, aspects, facets.

The question is how to build a system that honors each of them at each level of offering.

We would leave you with this big idea that we've taken away after over 15 years of work at San José State.

Carrie and I have learned a lot about how to teach well,

but we've also learned a lot about how to coach and support students from many backgrounds who are coming into our profession

and right-size resources is what it's all about: differentiating, chunking, figuring out what is digestible for the beginner.

So we think of it as a lot of different possibilities. And luckily for us, we have all of this work pretty much done.

So we don't think so much about textbooks for courses as much as we do ebooks that can be chunked and torn apart and put into right-size bits.

Articles we think of as primers.

So if we want to introduce a concept or an idea, an article becomes a short and fast quick primer to get our students engaged.

We're thinking more and more now about modules and webinars and podcasts,

all of which we have created and made available in various formats for students.

They can be embedded in clinical practice. We get feedback from our teachers that are in the cooperating teacher space that they're using

certainly some of these materials and they want to know where they are.

So the other big takeaway for us is quit burying stuff inside of courses and syllabi and blow it back

out into spaces where people can get a hold of it and they can play with it and they can learn from it.

So that is basically our story in a nutshell. I went as fast as I could, I hope we met our time marker.

Margaret and Carolyn, thank you very much.

Brent and Carrie, that was absolutely fabulous.

Uh, yes. Just terrific.

Thank you very much. I told you folks that they were trailblazers and I'm sort of blown away,

I mean, I to see it in its full glory.

Brent and Carrie, I mean, you have done so much. This has to be a model for other IHEs

I mean, you've done the work, and I mean, I've seen your students on video, and like I said, I'd have hired them in a heartbeat.

They look like veterans to me. What a wonderful preparation you're giving them.

Congratulations. Just incredible.