

Pearson Interactive Calculus Authors Video UPDATE TRANSCRIPT

Narrator:

Interactive Calculus: Early Transcendentals, 1st Edition is a fully curated, peer-reviewed, highly customizable set of complete resources designed to support today's instructors and students in single-variable and multivariable calculus courses. Backed by student learning research and powered by Pearson's MyLab Math, this new accessible platform enables educators to easily personalize calculus education to engage diverse learners in traditional face-to-face, hybrid, online, flipped, self-paced/independent course formats. Let's meet a few of the Interactive Calculus to hear why they are excited about Interactive Calculus and how they see it impacting students.

Meet the Authors

Jason Gregerson, Associate Teaching Professor, Mathematical Sciences, Michigan Technological University:

I'm Jason Gregerson. I teach at Michigan Technological University up in Houghton, Michigan.

Rachel Vincent-Finley, Associate Dean for Academic Affairs, College of Sciences and Engineering, Southern University and A&M College:

Hi, I'm Rachel Vincent-Finley. I serve as the Associate Dean for Academic Affairs in the College of Sciences and Engineering at Southern University and A&M College.

Marc Renault, Professor, Mathematics Department, Shippensburg University:

My name is Mark Renault. I am a professor of mathematics at Shippensburg University.

Jason Gregerson:

I usually teach calculus with a little bit of linear algebra and differential equations.

Rachel Vincent-Finley:

My academic role is an Associate Professor of Mathematics. And the courses I teach, I teach calculus courses, particularly Calculus I and Calculus III, and differential equations.

Marc Renault:

I teach a lot of calculus. I've been at Shippensburg for over 20 years, and it seems like most semesters I teach calculus. And I enjoy it and it seems like every time I teach calculus, I learn something new. So that's good.

Why are you excited about Interactive Calculus and how do you see it impacting students?

Rachel Vincent-Finley:

Interactive Calculus provides a fundamental foundation that allows the instructor, the professor, to scaffold on top of that. So all the basic, necessary information is there and it's up to the instructor to mold it into a course that is relevant for their particular institution.

It would be important to highlight the interactive assignments. The bundling of videos, exercises and readings. In that way they're getting nice modules of information, which again, provides a nice structure. So there's a structure there that you could do a lot of work around or do minimal work around. So with that piece, particularly for institutions that have multi-section courses, with those who have large courses, this will be really helpful for those who are supporting those courses. So not just the faculty but the graduate students and the junior faculty.

Marc Renault:

When I learned about this project that Pearson was organizing and bringing in authors to do video instruction together with interactive figures and a very organized library of calculus instructions, I realized that this is exactly something that was needed. Right now, there are a zillion videos online for math instruction, for calculus instruction. But they're very disorganized.

And this project says here is all of calculus, well-organized, small video lessons for every subject. And so, I really like that aspect a lot. One place to go for video instruction. And video instruction, this is how people are learning. When I want to learn how to do something, I had to— you go to a video. Not long ago I wanted to sew a button and what did I do? I went to YouTube to learn how to sew a button. So, yeah, people learn by video instruction. And so, it's nice to have everything in one place.

But, in addition to the video instruction, it's together with the interactive figures. I spend a lot of time playing with the interactive figures. I spend too much time. I get distracted and I should be doing other things. But they're engaging, right? They keep me occupied. They make me see the concepts of calculus just a little more deeply than I did before. And that's a delight. It's a process that keeps students engaged and really provides a deep understanding of the calculus concepts.

Jason Gregerson:

So I'd say the customizability. I mean, there are so many wonderful resources in the tool from the videos to the additional resources, but the beauty of it is you can really use it to teach any way you want to teach.

So I've been using videos my class since 2006. And I've really seen the value of incorporating them in my teaching. So students really, they benefit from the use of videos. But I haven't been able to make the videos that I wanted to make that really

incorporate dynamic motion and animation to really enhance the learning. So being part of this project really allowed me to create those videos. I am super excited to see what my colleagues and other people are going to do to implement those into their courses.

You know, I think one of the most important features in this is the animated algebra. It's no surprise to any instructor you're going to deal with that algebra is a weakness of all students. And the fact that we can incorporate this review of algebra, on time, kind of throughout the curriculum, is going to be really impactful to their success.

So I would say the other real important feature is just the visualization. I mean, when you're talking about equations that are moving around or, you know, visual graphs that are chopped in half and flipped over, it's a different way to see mathematics. I think we really take for granted what students visualize when they think of these mathematical concepts. I, as an experienced mathematician, see a lot of these things in my head, and I don't think students do. So I think adding this visual component will really be impactful. Yeah, I would say one thing is just the ease of implementation. I mean, the idea is that we have constructed a set that you should really be able to use as a base for your course so you could transition to this product really with minimal effort. So you can really use the interactive assignments as we prepackaged them, right. Or you can customize them. So I think it's really an easy implementation as a first implementation, but then you can fully customize it however you want.

Narrator:

Interactive Calculus supports the instructor in teaching, and engages students in learning calculus, with complete video-based instruction, interactive elements, and immediate feedback. Interactive Calculus allows granular customization for instructors and industry-leading prerequisite help for students.

Visit go.pearson.com/interactivecalc to join our pilot program, or to get exclusive author set up of the course.