



It's the Four R's Now: *The Future of Academics and Virtual Reality— an Interview with Erika Donalds* Doug Tutill

Editor's Note: JMI's long-time friend Erika Donalds recently launched the Optima Classical Academy, the nation's first virtual reality school with a focus on classical liberal arts curriculum. This innovative development got the attention of Step Up for Students President Doug Tutill, who featured Erika on his highly acclaimed podcast. Below is a (lightly edited) transcript of their conversation.

Doug Tutill: I'm excited to have Erika Donalds with us today. Erika has long been a champion of education choice in Florida. She's a former school board member in Collier County—which is the Naples, Florida area—and now heads the Optima Foundation. Erika, what is the Optima Foundation and what does it do?

Erika Donalds: The Optima Foundation is a nonprofit I started back in 2017. We help establish and expand high-quality schools of choice in communities here in Florida and now expanding across the country. We currently manage and oversee four schools, as of this fall, all the way from Jacksonville to Naples serving just under

3,000 students and we've got about 2,500 students on our waiting list. Also, we are in the process of launching the world's first virtual reality school. All our schools are in the classical tradition, delivering a liberal arts education that is both content-rich and virtue-based.

Tuthill: Let's talk about Optima Classical Academy. It's fascinating because it's a merger of virtual reality as a teaching tool, as well as a classical curriculum. Let's talk a little bit about what the school intends to do. What grades are you going to have in the fall? Then, we'll dive a little deeper into virtual reality and classical education, and how they come together.

Donalds: It is an interesting divergence of the most traditional type of education and the most innovative and cutting-edge technology—so, it's hard for some people to get their heads around. But during the pandemic, we sought to replicate the in-person experience for remote learning as much as possible. Unfortunately, not everyone did that. Obviously, remote learning as it's come to be known was detrimental to a lot of families—but that's not remote learning, it's actually remote not-learning. Our students were learning remotely. They received live instruction every single day. We sent home analog materials for them: books, workbooks, and things like that. Then we also had the virtual component where they were doing activities online, and what we heard from families was that they loved it. They wanted us to continue that offering because they enjoyed schooling at home. Many of our families now have more flexible work schedules or they're working from home. So, we wanted to create the gold standard of

virtual education.

We partnered with a gentleman named Adam Mangana—who's on my team now—who has been working in virtual reality education for almost a decade. We've combined those two things—live learning every day with a teacher live in a classroom in virtual reality and the Canvas learning management system with a robust classical curriculum. Also, we will be sending our students analog materials so they will be reading paper books of the classic literature that are included in our curriculum and they'll be annotating those books. They'll be writing in their math workbooks and notebooks as well as receiving live instruction in VR and doing some project-based learning outside. I think this is the new version of virtual remote education that's going to make it accessible, but also high quality for families across the country and maybe around the world.

Tuthill: So, you're opening in the fall as a charter school. What grades are you having?

Donalds: In Florida, we're offering full-time, grades three to eight. Students can also select individual courses if they would like to have an individual course and not full-time enrollment. We are also doing field trips—virtual reality field trips—that anyone can access who has a headset or, if they need a headset, we're happy to provide that. We are really making all these experiences accessible, whether it's full-time school all the way to individual field trips.

Tuthill: Let's talk a little more in depth about the experience of virtual reality for students and how the virtual reality field trip might actually work. Give me some

examples of where you would take children through virtual reality and what that experience would be like for the kids.

Donalds: Well, one of our field trips is to the moon and studying the lunar landing—actually from the moon itself. One of our field trips goes to Independence Hall and we walk through the founding of the Constitution and the Founding Fathers. We look at the artifacts that were created there and hear from some of the Founding Fathers in Independence Hall. We take students to the Oval Office when they're learning about the presidency. These are places that are so awesome because a lot of these students will never go to these places—or have never been anywhere outside of their hometown—and we're able to take them on some amazing trips.

We have some science field trips that simply go out into the mountains or underwater and they're studying the water cycle in three dimensions. They're able to label the parts of the water cycle as it's happening in front of them in three dimensions. We have—what you remember in class—these skeletal models. They have the muscles, they're in different layers and they're very expensive. Well, in virtual reality, everyone can have their own parts of the human body. They can hold a beating human heart and see exactly how it works.

Those are the types of experiences that our students have in virtual reality whether they're doing it as a field trip and just a short experience, or it's part of their everyday lessons with their teacher.

Tuthill: This is a huge breakthrough for equality of opportunity because, as you know, families with resources are able to

provide these amazing experiences for children. I was speaking the other day to a state rep who set as a goal when his kids were born to make sure they visited every national park. I think he pretty much had completed that. He had the resources to take his children to every national park in the country, but I when I taught at St. Pete High we had kids who—at high school—had never gone to the beach in St. Pete, which was 10 minutes away. So, the fact that these kids can now experience going to the moon or going to the Oval Office, it's just extraordinary. It begins to level the playing field so that all children can have the same opportunities that historically only kids with fairly affluent families are able to experience.

Donalds: It is and we're so excited to be hitting the market right at this time. Even the VR headsets were inaccessible just a few years ago and now that the prices have come down just a few hundred dollars, we can get these headsets in the hands of students through public funding as a public charter school. We've been able to create with an amazing team of people—who are very passionate about these education experiences—hundreds of locations. And how exciting as a teacher, as well. If you're a teacher who does not have the resources to provide students with these types of experiences, we have curators that help the teachers bring their vision to life of where they want to take the student and what type of 3-D experiences they want to give them. Then not only is it available to that teacher, but to other teachers to utilize as well in our education library. The potential for this, and for the things that will impact our students, is so great and so exciting.

Tuthill: Let's go back to the moon example—because I have to confess, I've never had the resources to take my students to the moon. So, I'm a teacher and my kids want to go on a field trip to the moon. I presume the kids actually feel like they're on the moon? They're actually able to walk around on the moon, is that correct?

Donalds: That's right. They actually do the lunar landing so they kind of get the feeling and understand what it's like when the astronauts are landing on the moon. That's the first thing, they're not just appearing on the moon, they land on the moon. They have to land first. Actually in our lunar landing field trip, they're wearing an astronaut costume and they can see their hands. When they look at their hands, they see that they're in an astronaut costume. They see the other students in this social experience that is our VR in their astronaut gear, but they also are going to be able to study the surface of the Moon; what it is like. The parts of the lessons are what the atmosphere is like and they're able to kind of experience it in three dimensions—not just read about it. They can walk all the way around the moon too and see—in very realistic ways—what the moon looks like, the different facets of it and what it looks like from the moon looking at the earth, for example. Think about how impactful that is for a student, maybe inspiring them to explore that field more—more than looking at those pictures on a page or even on a two-dimensional screen, but actually being in the experience itself.

Tuthill: For a teacher then, I'm taking my kids and going with my kids to the moon. We're landing in the lunar module.

We're getting out of the module. We're walking out to the moon. I'm prepared as a teacher to talk about things like: here's why the gravity is different; here's how it would affect us on the moon; here's why the colors are on the moon; here's what that means from a geological perspective. You mention atmosphere, water issues, potential life issues. I presume that the teacher is prepared to have all those conversations with the kids while they literally feel like they're on the moon.

Donalds: That's right. In the VR classroom, we can create a classroom out of any of these spaces that we've built. On the moon, the teacher can put up a whiteboard and start writing on the whiteboard or they can have a presentation that's prepared that they go through the presentation and the points that they want to make. They can also do a 3-D lesson. They can pop up quizzes to all of the students, right there on the moon, and the students can go ahead and test their mastery of some of the information that's been shared with them. Our students can also go off into groups, wherever they are—if it's on the moon, for instance—to do some kind of a project or share information and do presentations. The technology is such that if the students are off in groups, on the moon, the teacher can go around to those different groups and see what they're talking about, but the different groups don't have to hear—it's spatial—the sound. It's really amazing the amount of things that can be done and the creativity of our teachers—who have already started, by the way. Our brand-new teachers started last week. They were trained in virtual reality and they are really over the moon excited about the

possibilities of teaching in VR.

Tuthill: Well, this is extraordinary. As you were talking, I kept thinking about my middle school and high school experiences—which were a long, long time ago—and we all had textbooks back then. I’m thinking this is a replacement for textbooks. I mean, in the future, we’re not going to have these old textbooks where you read about these kinds of things in sort of 2-D flat page pieces of paper. But instead of the textbooks, you literally will be able to have lessons where today we’re going to study the Moon. Tomorrow we’re going to study the Galapagos Islands and spend a couple of weeks talking about evolution—the way Darwin learned about evolution on the Galapagos Islands. Or we’re gonna go to Yellowstone and understand the geology of Yellowstone or the Grand Canyon. Am I right about this? Is this basically the next generation of what used to be textbooks? A two-dimensional experience of these things, now it’s literally a three-dimensional experience where you’re actually there experiencing it with your teacher.

Donalds: Well, I think it actually allows for multi-dimensional learning to take place all in the same classroom. A lot of our classroom experiences are you’ll do some pre-reading in the virtual textbooks—the digital textbooks I should say—that we’ve created. Then, you’ll go into the headset and have a live learning experience with your teacher. It’s going to reinforce what you read and make it more practical. Then, you’re going to have an assessment that determines how well you’ve retained that information. I think it doesn’t necessarily

take away from reading—we are all going to continue to study information—but what the studies have shown is that when you have that reinforcement of that immersive experience, students are retaining more information, more quickly and for longer periods of time. It’s going to make the learning more effective and longer lasting, as well as really addressing some of the distractions that are in our schools right now that are very much affecting those with attention deficits and other special needs—the VR has tremendous potential for those types of students as well. But for all students, these studies have really shown to enhance the learning tremendously.

We did a pilot program out in California with fifth grade science students, and we covered an entire semester of information, with mastery, in six weeks of VR learning. The teacher that was associated with this pilot project was just amazed at how quickly the students would pick up the standards and be able to be assessed on those standards over and over again, retaining that information when they are taught in VR or the information that they have read is reinforced in VR.

Tuthill: Learning by doing, in kinesthetic learning, is an important part. You don’t get a lot of that in a traditional school system. I want to ask you a business question, because history is littered with the people who are first dying on the battlefield, because people that come after the first people tend to oftentimes be more successful. When you’re first, you’re experimenting, people are hesitant. Have you experienced that? Clearly, in my view at least, this is the

future. Clearly, you are the first into the future. You're sort of our version of Neil Armstrong, in terms of the kind of very dynamic learning environment you're creating. How have you thought about the business side of this? I mean, you're so new - you're taking a risk to get out there ahead of everybody else. I'm just curious, how are you managing that?

Donalds: It's a great question, because we did run into more resistance to this than we expected—even from those who are already committed to virtual learning in two dimensions. We thought that would be an easy conversion. We have a high-quality curriculum, we have better technology and we thought that's a no brainer. With something new and different it is always difficult to convince people to be the first. I think something unique about us is that while we are the first doing a VR school, we are not new to delivering high-quality classical education. We have four existing schools; we have a great reputation and great results there and long waiting lists. We've been doing it in person very well. We did it very well when we did it remotely during COVID and have the results to prove that. While we're using a different delivery model in terms of VR, we're doing the same thing we were doing before in a different way and with a different way of delivering it.

Of course, all these VR experiences that we're talking about are enhancing that high-quality liberal arts classical education, but we have a track record of what's most important about this, which is the curriculum. The technology is not what is really making a difference for kids. We've seen technology

come and go and everyone gets really excited about it and it really doesn't make a huge difference because technology is just the delivery method. The secret sauce truly is the classical method of education behind the VR technology. I believe that we have the best assembled team combining the greatest minds of classical education with the innovators of virtual reality and virtual reality education in K12. I don't know, I think it'd be very difficult for anyone to assemble a team of that level of talent—in any short period of time—to really catch up with what we've been able to do. I think—you know me—I'm a very aggressive entrepreneur, we are already working on multiple states to be the public option, maybe their only virtual public option. Some states have not even ventured into that realm yet and we're looking at those states. But for those who have the virtual option available, we want to be an alternative to two dimensions in zoom school or asynchronous learning and really provide a classical education option for every single family in the United States.

Tuthill: So there are some other groups out there trying to do some pretty cool stuff and doing some pretty cool stuff. I'm curious about the relationships that you might have formed. I had a previous conversation about this. I know that our friend Julie Young, who started FLVS, is now at Arizona State University—that's sort of widely seen as the most innovative university in the country. They're doing all kinds of amazing things throughout that university, but she's also doing some great stuff in K-12. They've just formed a partnership with Khan Academy who obviously has been trying to do

some stuff. Have you formed any of those partnerships yet? What have you thought about any of that? What's that look like to you?

Donalds: We haven't formed any formal partnerships with Arizona State University and their virtual program FLVS—Florida Virtual School. Great Hearts has a great online program, but we've been in conversations with all of them. The way I've always been with the schools is I'm such a proponent of school choice and education freedom, that I am all about helping one another and finding ways that we can work together to help kids. It's really the work of my life. It's my heart's work and my life's work, it's not a competition to me. We can all work together and find ways to meet the needs of students and families across the country. The more the merrier. There's plenty of room in this education freedom space for lots of players, lots of innovation and I want to see all of them succeed. We just had Curtis Fuller from Great Hearts Online, the superintendent there, speak at our teacher training conference. Those are the types of friendships that we have across the spectrum when it comes to not just virtual learning but classical learning and other school choice initiatives. I think we're all really working to help each other innovate and help as many students and families as possible.

Tuthill: I know you've talked to us in the past; I think we did an interview with you on ReimaginED about the work you're doing, and we talked some about ESAs. But I want to go back to that topic because Education Savings Accounts—which give families way more flexibility to spend their dollars—also open up some interesting business opportunities. You mentioned people can purchase classes from you so I assume that the ESA movement in Florida and around the country is also something that you have your eye on because that means you can unbundle some of your services and sell them piecemeal. Talk to me about that. Is that part of your business plan? Do you see this train coming in you know that there's going to be ESAs across the country? In Fall 2023, we'll probably have over 300,000 kids on ESAs in Florida. They'll have probably about \$1.7 billion in ESA funding in the state. How do you see that as an educational entrepreneur?

Donalds: I'm so excited for the ESA movement and not because I now have a virtual reality school that people can purchase, but because I've been advocating for Universal ESAs for the past almost 10 years now as the future of education choice. I envision a future of education where families can customize the entire education experience for their children. They can have a virtual reality science class and a paper book

mathematics class that their very intelligent homeschool mom wants to teach. Maybe the local museum does a civics course for them and that's where they get that. I would really like to see—using the ESA model—families be able to fully customize the education experience to meet the needs of their children, including being able to purchase special services and tutoring—which we're also looking to provide. We're very excited about the expansion of ESAs, of course, in my home state of Florida. We want to be a

part of that and be a part of providing those services. We're certainly talking to Arizona. I feel strongly that we need to go to Arizona to reward them for being the ones to do universal ESAs and provide the supply for the demand that we know is coming when those are rolled out. Across the country, we're definitely going to be continuing to advocate for universal ESAs and then being part of the education freedom solutions for families.