New Faces in STEM Careers

Narrator: Denver School of Science and Technology is a public charter school network with a mission to serve students from all walks of life. Green Valley Ranch High School was founded in 2011. A founding math teacher, Jenna Kalin became director in 2012.

Jenna Kalin, School Director: We use the term high support, high accountability a lot as we reflect on what we want to provide for our students. And we do that through a few different ways. One is, each of our students is a part of an advisory with 14-15 other students, one advisor, and it's really our way to ensure that no student slips through the cracks, that every student has an advocate in the building. Our six core values: respect, responsibility, courage, curiosity, integrity, and doing your best drive our work on a daily basis. Four days a week we start our school day by coming together as an entire community for a twenty-minute morning meeting.

Morning Meeting Speaker: Some of you are hidden figures in your own right. You just don't know it yet.

Jenna Kalin: This is one of our most powerful opportunities to really highlight what matters most in our school which is community, our commitment to core values, and our college-going culture.

Narrator: Staff and students reflect on the Morning Meeting.

Dhamana Stamps, Dean of Students, Prep Academy: it's just an opportunity for us to get together to share information, talk about current events, or just have a dialogue around some of the challenges that teenagers are faced with.

Grade 10 Student: Okay so I feel like it builds a sense of courage—that’s one of our core values. I feel like a sense of courage with the Morning Meetings that we have, because like the Morning Meetings they help push each person to contribute to our community and bring each person together. They really make us feel like a family.

Grade 12 Student: I am the president of our Black Students Alliance here, so I have run a couple of morning meetings about black history month I think that some of the morning meetings are pretty powerful and they start the day off pretty strong.
Jason Van Tiem, Dean of Students, Upper Academy: That sense of community allows us to start the day together and make sure that our heads are in the right place as we go into extremely rigorous learning environments.

Narrator: Brittany Bernacchi is Director of Curriculum and Instruction.

Brittany Bernacchi, Director of Curriculum and Instruction: The DSST network has higher graduation requirements than the district requirements. So what that looks like is, students need to take six years’ worth of science classes.

Jenna Kalin: First, we know that future jobs in our country are going to require a great education in STEM fields and we also know that our student populations are typically under-represented in STEM fields which are often some of the most needed and well-paid jobs in our country. We work very intentionally to make sure that our students are leaving prepared to major in STEM fields in college if that is what they would like to do.

Narrator: To date, 100% of all seniors have graduated and gone on to college. Nicole Rawson is Director of College Placement.

Nicole Rawson, Director of College Placement: We really focus on getting kids to know who they are and what their future looks like. We find that if they can't see themselves in their futures, it is very hard to build it for themselves. We seek to answer the question who are you and what impact will you make in the world. We are also giving them the knowledge of the abundance of opportunities and college options out there that are going to best support their dreams, their goals.

Narrator: Michele Ford teaches integrated Algebra and Geometry 1.

Michele Ford, Math Teacher: In my first year here one thing that resonated with me was that I am an African American woman who teaches math. I had a couple of African American boys in their junior year who didn't understand the sense of like, you could be black and be a mathematician. We try to be very intentional about giving our kids an opportunity to see themselves in the careers that we are talking to them about every day.

Jenna Kalin: As we think about student learning we know that the most important thing is that every single student is receiving excellent instruction every day in the classroom, and so a big part of my job as a school leader is to support teachers to constantly grow and improve in instruction every day for their students.

Narrator: Every teacher at DSST meets with a coach weekly to reflect on instructional successes and challenges. Madi Shipley teaches eleventh grade Pre-Calculus Honors. She taught at another school for two years before joining DSST.
Madi Shipley, Math Teacher: I had never had an instructional coach before. So when I first started getting feedback it felt very weird for someone to be pushing me outside of what I was used to doing for the last two years. [PAUSE] It drastically changed the student achievement I was seeing in my classroom and also the way I ran my classroom. Now a couple of years down the road I’m the math department chairs so I spend a lot of time in other math classrooms giving the same sorts of feedback and coaching help that was given to me my first year here.

Narrator: Isabella Cochrane teaches eleventh grade ELA.

Isabella Cochrane, ELA Teacher: I think at every school you have teachers that you work with, but when I came to DSST it was like an expectation that you work together. And just I love that because we have been able to sit down on an entire professional development day and develop really strong curriculum.

Narrator: All DSST students are required to take an internship and complete a senior capstone project as part of their graduation requirements. Two seniors describe their experiences.

Grade 12 Student: My senior project is actually an extension of my internship. I don't want to go into education however I really do value education so for my senior project I am raising $500 for Reading Partners and holding a gala fundraiser around education empowerment. In the future, I hope to see myself at Notre Dame next year or CU Boulder to study automotive software engineering.

Grade 12 Student: My senior project is going to be a food blog, but it’s going to be of soul food, so traditional African American foods that I have grown up with. Hopefully, I will be attending CU Boulder, studying to get a degree in applied mathematics.

Brittany Bernacchi: Yeah, I think that we are like proud, proud to be nerdy and proud to love learning, and I think that having curiosity as one of our core values just highlights the importance of learning constantly and I think that’s ultimately what we want, is for students to be excited and engaged about what they are learning.