

Megan LeBleu talks how film changed her classroom and 10,052 math classrooms across the United States

MidSchoolMath's Director of Curriculum shares her journey from Mount Everest to Mars

By Alex Usatine, Chief Editor
& Jen Lightwood, Co-Founder

At the beginning of her teaching career at Ernie Pyle Middle School in the South Valley of Albuquerque, Megan LeBleu sensed that her students needed more than what she was providing. With many speaking English as a second language, the text heavy curriculum was difficult for them to access. Over the years, she and her colleagues spent time outside of teaching hours trying to enhance lessons from the textbook to make them feel more fun and engaging to students that might not otherwise care about math. "A lot of times it was as simple as a YouTube video setting up the context of a problem," LeBleu noted. "One lesson talked about a bicycle race, and we knew our students might not have a concept of what that looked like. So we found a funny video about bicycle racing where there were a lot of crashes and weird things happening, just to get them interested in being in the room."

After learning about MidSchoolMath from the documentary *The Biggest Story Problem* and being invited to attend one of their first PDs, LeBleu was inspired to try creating curriculum from scratch based around a story that had inspired her.

MSM: When did you realize you wanted to teach math?

Megan LeBleu: From an early age, like six or seven years old, I always played school where I was the teacher, and my stuffed animals were the students. And then throughout my education, I did really well in math. It was my favorite subject, partially because my favorite teacher growing up was my

middle school math teacher.

MSM: What were some of the challenges you faced as a teacher?

ML: I had a lot of students who didn't have the easiest family life. I found I had students who needed a lot of love and compassion while I was trying to teach them academic content. So, my colleagues and I worked really hard to try to make curriculum from the textbook feel engaging and enticing to students who might not otherwise care about it.

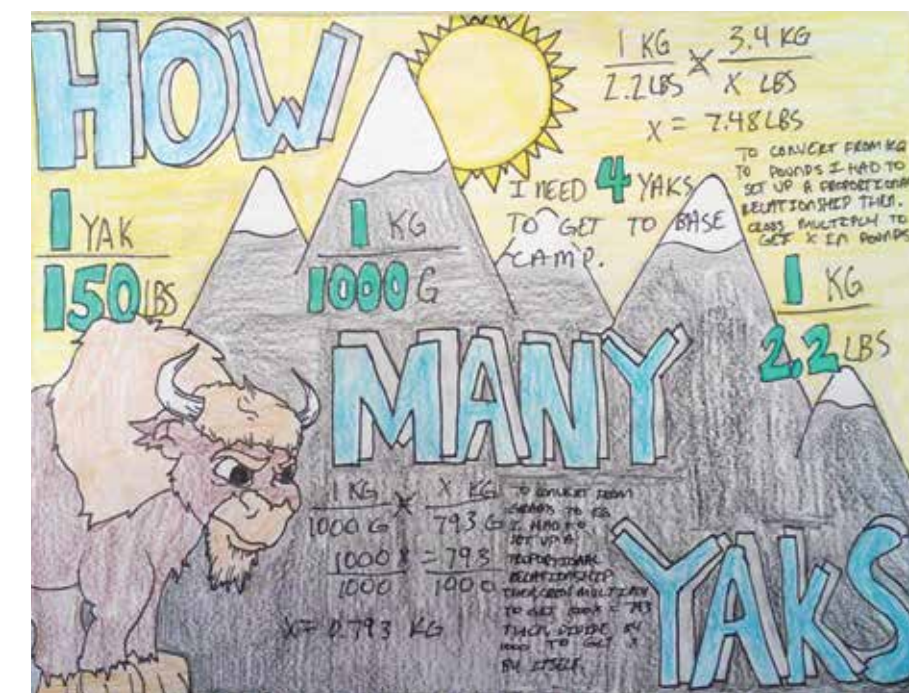
“It just made sense in my mind because the narrative and film images framed math in context.”

MSM: Tell us about the lesson you built.

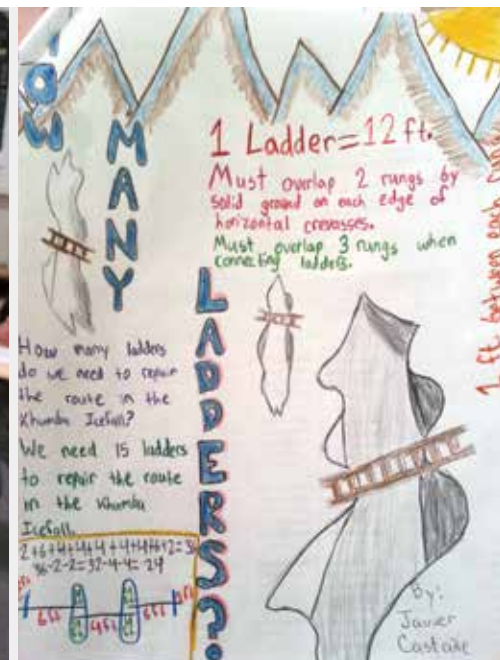
ML: I was still a traditionalist at heart,

but I was really intrigued by how MidSchoolMath teaches math lessons through a story structure, from immersion to resolution. So, I attended a professional development by MidSchoolMath and it totally changed my view of how math could and should be taught. It just made sense in my mind because the narrative and film images framed math in context, even though I never learned that way. I chose to build a lesson based around Mount Everest because it's a fascination of mine. We created a series of videos that starred a friend who had actually climbed Everest. The first math problem was: How many yaks do you need to climb the mountain?
MSM: How did your students respond to a lesson filmed with a live actor?

ML: Compared to other curricula I used before, during Expedition Everest there really was a genuine response and curiosity about the char-



Megan LeBleu speaks at the MidSchoolMath National Conference in Santa Fe, NM.



Left: LeBleu demonstrates a carabiner and rope that might be used to climb Mt. Everest. Right: A student reflection on one of the math problems within the Everest lesson.

acter and the story. Film helped bring Mount Everest into my classroom for my students to experience, and math just happened to be wrapped up in it. Film also widened the worldview of my students, geographically and culturally. **MSM: Your students really connected to this place across the world.**

ML: Just like movies on the big screen, powerful visuals can transport a viewer into a place and time. My students can tell you about yaks and the Khumbu ice fall. They were excited to virtually connect to climbers in the region. When one of several devastating earthquakes occurred during our *Expedition Everest* unit, my students and I raised money and donated it to a fund set up to help the families of the Sherpa.

MSM: And how did this impact your students learning the math?

ML: The first thing I noticed is that my students actually cared about the math. They wanted to know how many yaks they would need to climb Everest. They were excited to determine how many ladders they would need to make it through the Khumbu ice fall. I noticed their work became more careful and deliberate, and often included visuals. It so impacted how much they wanted to learn math that every day they would come in and ask: “Are we climb-

ing Everest today?”

MSM: And what did you do after Expedition Everest?

ML: I finished out the year, but I admit it was difficult to go back to the lessons in our textbooks, no matter how much we tried to enhance the math problems. And that’s when I realized that as much as I loved teaching, I also loved building curriculum.

“It was hard. Coming up with real life situations where every single math standard could be applied is not an easy task.”

MSM: So, you accepted a position to help MidSchoolMath build Core Curriculum™ for every middle school math standard the same way you approached Everest.

ML: When I created Everest, my colleague and I used an iPhone and a green sheet as a backdrop for filming and iMovie to put it together. When I joined MidSchoolMath, they had a full production team; with a cinematogra-

pher from the film industry along with professional writers, actors, artists, animators, and software engineers. The team really upped our production game, but in terms of developing an entire curriculum, it was hard. I mean, coming up with real life situations where every single math standard could be applied is not an easy task.

MSM: That’s sort of what MidSchoolMath is known for – real life application?

ML: Sure. I think that’s one of our claims to fame. In Core Curriculum™ we created 272 short films using live actors to immerse students into a context where that math is purposeful and meaningful. There are serious stories such as the Cholera Outbreak of the 1800’s, and more exciting stories like Escape from Mars, and funny stories like a group of goats that want a new pen. Film brings a story to life; and a story brings math to life in an authentic way, especially compared to a flat paper textbook with little to no context or humanity.

MSM: Why is immersing students into these scenarios so important in math class?

ML: Students always ask, “When am I ever going to use this?” The short movies involve students in the prob-

lem they are trying to solve, which becomes relevant because they want to know what happens in the story. I think it’s because film as a medium for curriculum enables students to empathize with characters and potentially gives them more desire to engage in math class. What’s also incredible is that students remember the stories and the math which is also great for teachers.

MSM: How so?

ML: For example, when a teacher is introducing a new lesson, they can refer to a past lesson to connect the math concepts for students. The power of film and stories as tools for retention and recall is incredibly evident as students reference the story and then recall the math, almost seamlessly. I think the film format helps students see purpose to the math in a concrete and tangible way.

MSM: And this is now having an impact across the nation?

ML: Through our conferences and our core curriculum, there are now 10,052 classrooms around the nation that have used our film and rich narrative story to teach math. That impact is so great that I can go into a classroom –

whether in Livonia, Michigan; Santa Fe, New Mexico; or Portland, Oregon – and a student can tell me the characters, the story, and the math in the lesson.

“With Expedition Everest, I think my students got excited about it because I was excited about it.”

MSM: And what has the impact been on students?

ML: You can watch the video on the homepage of our website from a school in Kentucky and you’ll see students remembering the names of lessons from a half year before and the math they learned in that lesson. I can’t think of any other curriculum that would have achieved that result.

MSM: Besides the film series, what other components are in Core Curriculum™?

ML: Our curriculum has simulation trainers for every lesson, where stu-

dents have the opportunity to see how the math works in context. We also have thousands of math questions in our adaptive test trainer, a print component, clicker quizzes, and milestone assessments.

MSM: How does MidSchoolMath compare to other math curricula?

ML: If you think about math class and math textbooks, Core Curriculum by MidSchoolMath looks nothing like the images that are conjured up in most people’s minds. That’s because we use film, we use live actors, we use technology. But the technology helps teachers facilitate discussions in their classroom instead of just having students on a device the whole time. We really do care about teachers and students as people, and we’re trying to connect to the whole person during the learning process.

MSM: What advice would you give a teacher who is using a more traditional curriculum and wants to increase their students’ engagement with the material?

ML: I would tell them to try incorporating elements of film and story into math problems and watch student engagement. With *Expedition Everest*, I also think my students got excited about it because I was excited about it. So don’t be afraid to share what you are passionate about, because it allows your students to share more of themselves in your math classroom.

MSM: What has been the hardest and most rewarding part of your job?

ML: As a perfectionist at heart, it is very difficult for me to accept that things are never going to be perfect for every situation. That weighs on me heavily, because I know how hard teaching is. Yet, beyond hearing anecdotes and success stories from classrooms, we receive e-mails where teachers thank us for making our curriculum. I’ve also heard from teachers that our curriculum and our pedagogy has reinvigorated some who had been planning to retire. And they’re so inspired that they want to give it a go with their students for another year, and that’s especially gratifying.

Below: After viewing the Everest immersion video, LeBleu passes out the inventory lists students will need to complete before the expedition.

