

FACULTY PERSPECTIVE:

How to Achieve Student Success with Academic Video

Featuring Best Practices from a Veteran Educator



Imagine using academic video to strengthen pre-requisite skills, enhance curriculum content, ease anticipated student struggles, and push students further in their knowledge of course material.

Learn how an innovative educator uses Mediasite to strengthen skills, ease struggles, and push her students further.

Brooke McCurdy has been teaching math for more than 14 years. When her classes morphed from a traditional in-person method to using more academic video, she saw the success of her students soar as they became more engaged.

In this ebook we uncover Brooke's successful approach for using video to teach math to grades 9-20. She'll help you understand how to:

Demonstrate student growth

Maximize Knowledge Retention and Student Improvement

Take the Guesswork Out of Course Design

Tailor Flipped Lessons to Student Needs

Ease Student Struggles

Reinforce Complex Concepts

Personalize Learning

Analyze Viewing Behavior

Brooke has taught high school and college mathematics for 14 years. She currently teaches at The Collaborative College for Technology and Leadership (CCTL), an early-college high school in Statesville, North Carolina. CCTL provides a technology-enriched curriculum to students in grades 9-13 while they simultaneously earn a high school diploma and a two-year college associates degree. CCTL has been recognized as a school for "Innovation and Excellence," a distinction given to only 16 schools in North Carolina. In 2016, CCTL was awarded a bronze medal in the U.S. News and World Report National High School Rankings.

Brooke has a Bachelor of Science in Mathematics, a Master of Science in Curriculum & Instruction, and an M.B.A. She is a member of the National Council of Teachers of Mathematics. Brooke was named Iredell-Statesville Schools 2015-2016 District Teacher of the Year in North Carolina and was selected as an Innovative Educator/Trainer. She has presented at North Carolina New Schools Summer Institute, Iredell-Statesville Schools Innovation Showcase, and Media & Learning Brussels.

Meet Brooke.
Veteran Teacher.
Innovative Educator.



Brooke McCurdy, BS, MS, MBA



Demonstrate Student Growth

The Collaborative College for Technology and Leadership (CCTL), an early-college high school, which is a high school and college hybrid where students take both high school and college classes at the same time. In this setting, the school, faculty and students are measured heavily on mathematics, science, and English.

Here's how CCTL measures up out of 600 high schools in North Carolina:

- After one year of using academic video with Mediasite, the test scores put the school in the top 6% of the state
- By 2016 the school has jumped the top 2% in the state, and has exceeded all student growth targets

After implementing academic video with Mediasite, the school has jumped to the top 2% in the state, and has exceeded all student growth targets.

We didn't have these results before our use of academic video and Mediasite. So really it has helped us grow, not only in my classroom and as individual students, but as a school in general. My colleagues and I are all using Mediasite."

Maximize Knowledge Retention and Student Improvement

66 Video reinforces learning, and my students have become better math students. We measure student improvement both formatively and summatively, and we've seen growth across the board. I've seen:

Using academic video to reinforce learning, we've seen student growth across the board.

- Retention improvement in the classroom.
- Repeat viewing of videos to reinforce topics.
- Improvement in formative assessments include questioning, exit tickets, pre- and post-assessments.
- Improvement in summative assessments include required district tests, ACT tests and state tests."





Take the Guesswork Out of Course Design

We all know that one-size-fits-all doesn't work for educators or students.

In my experience, neither 100% lecture nor 100% flipped classroom are truly successful. I've found that combining multiple methodologies helps the students with their individual learning styles, including:

- Inquiry-based learning
- Lecture
- Lecture capture

- Flipped lessons
- High levels of questioning
- Mathematical discourse

Combining multiple methodologies helps the students with their individual learning styles.

My Mediasite videos are smoothly integrated into our learning management system, Canvas. It's really easy to organize these videos and other course materials and create a seamless course design with just a couple clicks."

Tailor Flipped Lessons to Student Needs

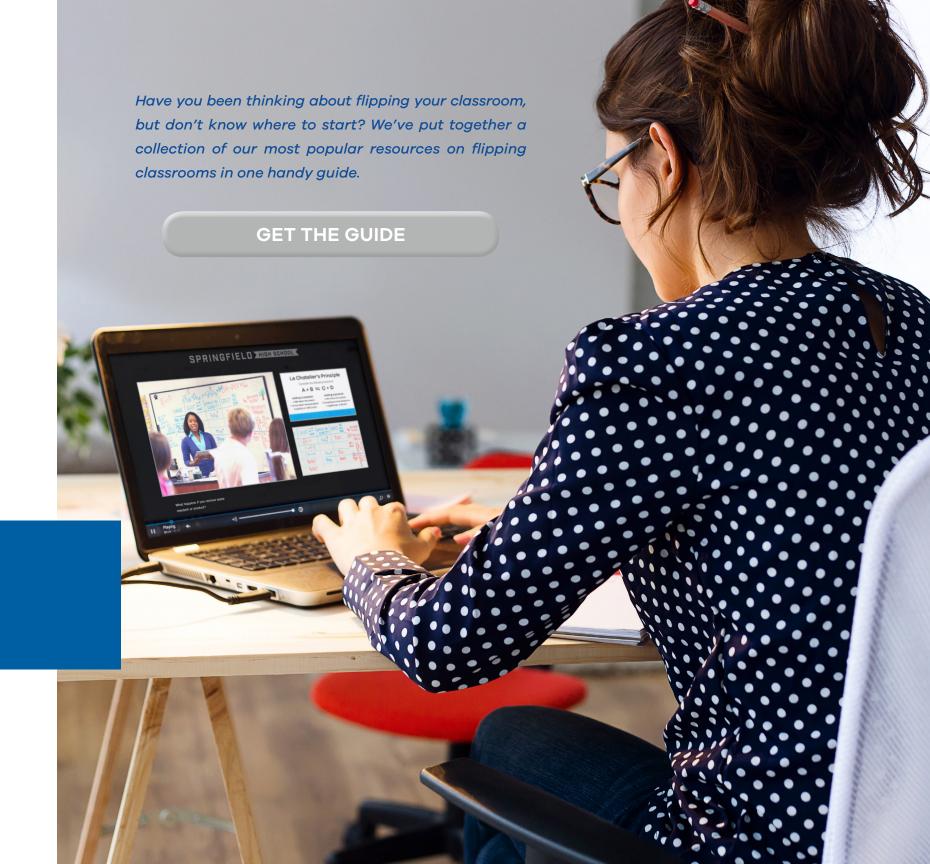
One way I use academic video is in a true flipped-lesson setting. I send students a video to watch before they come to class the next day so that we can actually have more rich discussion and I can use higher levels of questioning with the students.

Flipped videos also help me address different levels of learners. I actually create multiple videos through Mediasite, and send different videos to different groups of learners. In this way, I've differentiated and made it a more personalized learning environment for them.

Students prepare questions ahead of time so when they come into class we jump right into getting their questions answered and having that rich discussion.

I actually create multiple videos through Mediasite, and send different videos to different groups of learners.

By doing flipped lessons ahead of time with Mediasite videos, I can give them more answers to their questions. I can look at certain problems that they're having and show them ways to improve upon them. So they really get better feedback rather than just regurgitating facts."





Ease Student Struggles

As educators, we have to anticipate concepts that students may struggle with.

I create videos to explain concepts in detail that the students can revisit at any time in the LMS. They can look at them while they're completing homework, while they're preparing for a test, or working through projects.

When students don't understand certain concepts that we've worked on, they'll often e-mail me asking if I have any videos or if I can make videos.

When students don't understand concepts, they'll often ask me if I can make a video.

They really see the importance in using the videos to ease some of their struggles with mathematics."

Reinforce Complex Concepts

1'Il often create videos using Mediasite Desktop Recorder to reinforce something that we did in class. It might be a video that I want them to look at later on to help reinforce what we just went over, or reinforce some of the ideas that they developed throughout the learning in the classroom.

With the videos available at any time, students can use them to better understand concepts that we've covered during class.

And although I welcome student questions through email or in person, some students are still hesitant to ask. With the videos readily available at any time, they can use them to better understand concepts that we have covered during class."





Personalize Learning

Mediasite provides a lot of benefits for me, my colleagues and my students. Today, one of the hot topics is personalization of learning and being able to address all levels of ability.

While some learners are just fine with a recorded lecture, others need short videos that focus on a specific topic.

Through Mediasite, I can actually tailor the academic video to meet the needs of the learners. While some learners are just fine with a recorded lecture, others need short videos that go into a little more detail or focus on something specifically.

This personalizes the learning, and enriches class discussion, since all learners will have a good foundation. We actually have some excellent mathematical discourse by having them watch these videos ahead of time."

Analyze Viewing Behavior

Mediasite analytics give me the data that I need to help drive my instruction day-to-day.

I can see which sections of the video have attracted student focus and create new lessons to address those concepts.

I can see exactly which students have watched the videos, and I can also spot hotspots in the videos, where multiple students have really focused on one section.

I can see areas where they have focused in the video that might need reinforcement, and I create new lessons to address those concepts."

Five- to eight-minute videos seem to go over best with students when it comes to short, flipped-lesson videos. Students usually don't finish watching anything longer than that.

