

# Online Gateway Course Pass Rates - How One Community College Increased Student Success





The largest community college in Kentucky’s state-wide system, Jefferson Community and Technical College (JCTC) was facing a challenge. Concerned with low success rates in mandatory entry-level courses, administrators set out to overhaul the ‘gateway courses’ that were stopping students from getting to the next level.

## Need to improve gateway course success

Margot McGowen, Title III Grant Project Director, explained the importance of reaching students early on.

“If they didn’t complete those particular courses that were the gateway into the rest of their programs, then we lost those students, sometimes forever,” Margot said. “Our goal was to improve the success of students who enter those courses



by pursuing advanced instructional techniques, active learning, and best practices in instructional pedagogy. A large part of that is technology-supported learning.”

Lack of the right technology was part of the problem. While there was a robust certification training program in place to show faculty their BlackBoard learning management system (LMS), there were no tools or training on how to use video. Without a formal system for lecture capture, instructors didn’t have a good way to record and share video lessons for online and hybrid courses.

“We didn’t really have an understanding faculty-wide what online learning even is,” Margot said, “let alone the best practice of short, focused video lessons.”

Without video tools and training many faculty hadn’t included video, and were unaware of how to use it and the potential benefits. Aaron Nusz, Director of eLearning, advocated for video with faculty who were eager to press ahead, but fielded more questions than answers.

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“Some of the other things we were using to accomplish video, like Articulate, were extremely complicated,” Aaron said. “It takes a lot of training and professional development to be able to use that tool.”

Not only was it far too complicated to use, there wasn’t a good place to host videos. BlackBoard course shells have limited data capacity of 500 megabytes. That’s not nearly enough storage for an online course with video.

“Every semester I had faculty who uploaded too many documents, videos, or PowerPoints, and they ran out of space,” Aaron noted.

## **Pursuit of personalization and interaction**

The larger Kentucky community college system continued to stress the importance of quality interaction, acquiring a video solution that would provide those elements became a big part of the equation.

“As part of our online course redesign, our instructional designer focuses on three methods of interaction — student-to-content, student-to-instructor, and student-to-student,” Margot explained. “Those are the three areas that are very challenging to get within an online course.”

From an instructor point of view, Aaron was keen to find a video solution that would help increase student-instructor interaction.

“We didn’t want our online learning to turn into correspondence courses,” Aaron said. There were valid reasons to be concerned about this perception, since it was a common complaint on end-of-semester student surveys.

“Students think some of the third party content from McGrawHill or Pearson comes across as too canned — something that was made for more of a general audience,” Aaron said. “It’s not really personalized, it’s not their instructor.”

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## Skeptics of flipped learning

Another part of the larger course redesign involved a trend toward active learning, which requires less lecture time in the classroom.

“That is a very scary thing for faculty who have been lecturing twenty or thirty years,” Margot related. “When you look at the amount of content that they have to cover, it feels like a threat when we say you have to reduce the amount of lecture time. Because that is the way they know to communicate the content.”

Administrators encouraged instructors to incorporate more active learning via different methods — collaborative work in class between students, small projects, think-pair-share, student-teaching, and similar activities. However, all of these require students to be at least somewhat familiar with the material before they come to class, and leads back to the flipped classroom model. Given the lack of a viable video solution up until that point, it wasn’t a surprise that most instructors did not want to flip their lectures.

“A lot of faculty scream when they hear that phrase,” Margot said. “They say ‘There’s no way! Flipped does not work. You cannot make students do work before they come to class. We’ve tried it, we’ve done it, it doesn’t work.’”

A final criteria for a video platform was to make it easy to add captions and provide other ways to reach students of all abilities.





“I fell in love with Camtasia and found it so easy,” Aaron said. “I’ve always been a huge fan of the product. I bought a license for myself for Camtasia to help in my courses for four or five years. It was something I was paying for out-of-pocket, because it was just so great.”

“That was an area that we felt severely behind,” Margot said. “We definitely wanted to address that with a new product.”

## Search for a solution

Administrators went on a fact-finding mission to seek a solution with the best and most flexible options for creating, editing, sharing, and measuring videos, as well as making them accessible. One of the most important factors was that the solution would be easy for faculty to use.

“We had used Camtasia and a few other TechSmith products as part of a previous grant,” Margot said.

A lot of faculty found it straightforward to use, and loved the editing capabilities.

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came along, and it was like ‘This takes it to the next level.’”.

There was consensus on this from other administrators and faculty as well.

“We saw how Knowmia had been boosted with a lot of new offerings in the product, and a lot of new capabilities,” Margot said.

Another big factor in the selection process was that the solution be affordable and scalable.

“With the grant, we have to start small,” said Margot. Instead of giving access college-wide, a gradual rollout made more sense. “We need to be able to start small, build use, and build faculty interest in it,” said Margot.

Not only was scalability a crucial element, it was important to choose a vendor that they trusted, and was based on feedback from educators.

“Every year at BlackBoard World I would talk to the people at TechSmith about Knowmia and was always trying to figure out funding so I could get this thing done,” Aaron said. “The stars aligned.”

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## Gradual, grassroots adoption

Despite wanting everyone on campus to have access right away, Margot made sure that the Title III faculty teams had priority use, pursuant to the grant. After making sure the core group was accommodated, it was time to share it with everyone.

“That really got the ball rolling,” Margot explained. A few trailblazers definitely helped spread the word as well. “Aaron and some other folks in the nursing department started using it and talking about it,” Margot said.

Due to the timing, Aaron enjoyed being one of the first ones to use Knowmia.

“Everybody else had already created all their stuff and planned out their semester, and didn’t want to add anything new,” Aaron said. “It was just my classes who were using it, which was nice because it allowed me to figure it out, and figure out how I could sell it. I got really good at how to do everything. I got really good at the tools.”

As the beginning of the next semester approached, Aaron’s success with the product began to spread.

“Leading into the spring, I started to reach out to people and say ‘Hey, I have this new thing. Maybe this is a solution for you,’” Aaron related.

For anyone not yet using Knowmia, Aaron encouraged a hands-on introduction.

“If one of our faculty is on the fence about using it, I’ll just send them the link and say ‘Here’s how you download the recorder, Just try it,’” Aaron commented. “I’ve never had somebody come back and say ‘Nope, not for me.’ Everybody that I’ve ever convinced to try it and actually work with it has really adopted it.”

The nursing department was the first one to jump on board. Excited about the possibilities, they divided up different chapters of their course material between faculty, to cooperatively create and share videos for their course sections.

As other instructors on campus saw their success, interest grew. Margot, along with Jennifer Anstey, Instructional Designer/Course Redesign Coordinator, found themselves talking about the new video solution increasingly to faculty across campus.

“Everybody that we would talk to, we would mention Knowmia,” Margot said. “We started getting departments and divisions saying, ‘Hey, can you come to our

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division meeting and teach us how to use this thing?’ The more people we taught, it started to snowball from there. Everybody started talking to everybody else.”

As the Director of eLearning, faculty frequently came to Aaron with questions about how to solve problems in their courses. Finally, he could give them the answers they needed.

“They would say, ‘Hey, I have an issue. How can I make BlackBoard do ‘this thing’?’ A lot of times I would say, ‘There’s this thing called Knowmia that would solve that problem for you.’ It was a very grassroots adoption,” Aaron related.

### **‘Plays well with others’ and the LMS**

As adoption grew, administrators found the training and onboarding process simple.

“There are two reasons why it’s so easy for me to sell Knowmia to the faculty,” Aaron explained. “Number one: it’s extremely easy to use. They love the built-in recorder and that it’s very easy to edit. Also, the accessibility with closed captioning is extremely easy.”

Compared with the previous video tools they had used, this one did not take a lot of training or professional development.



"For me, that 'wow moment' always happens when I show faculty the integration between BlackBoard and Knowmia,"

"With Knowmia, I just send them to the website and say 'Here, just start trying it. Whenever you have questions, then come back to me'," Aaron said.

Aaron noted a second aspect that makes Knowmia easy for faculty is unlimited storage, as opposed to trying to cram all course materials into a space-limited LMS not designed to host the amount of video needed for an online course.

"With Knowmia, it doesn't take up any space," Aaron commented. "It solves a lot of space issues that we have with BlackBoard."

Administrators saw that having the new video capabilities made BlackBoard shine.

"For me, that 'wow moment' always happens when I show faculty the integration between BlackBoard and Knowmia," Aaron said. "Assessment analytics — having the grades pull over directly from Knowmia into BlackBoard — amazes them on so many levels. That moment where they can insert a quiz into a video, or pull over a YouTube video and then insert a quiz, which they can then pull over into



BlackBoard. The seamlessness between BlackBoard and Knowmia is what they really love.”

## Flipping the skeptics

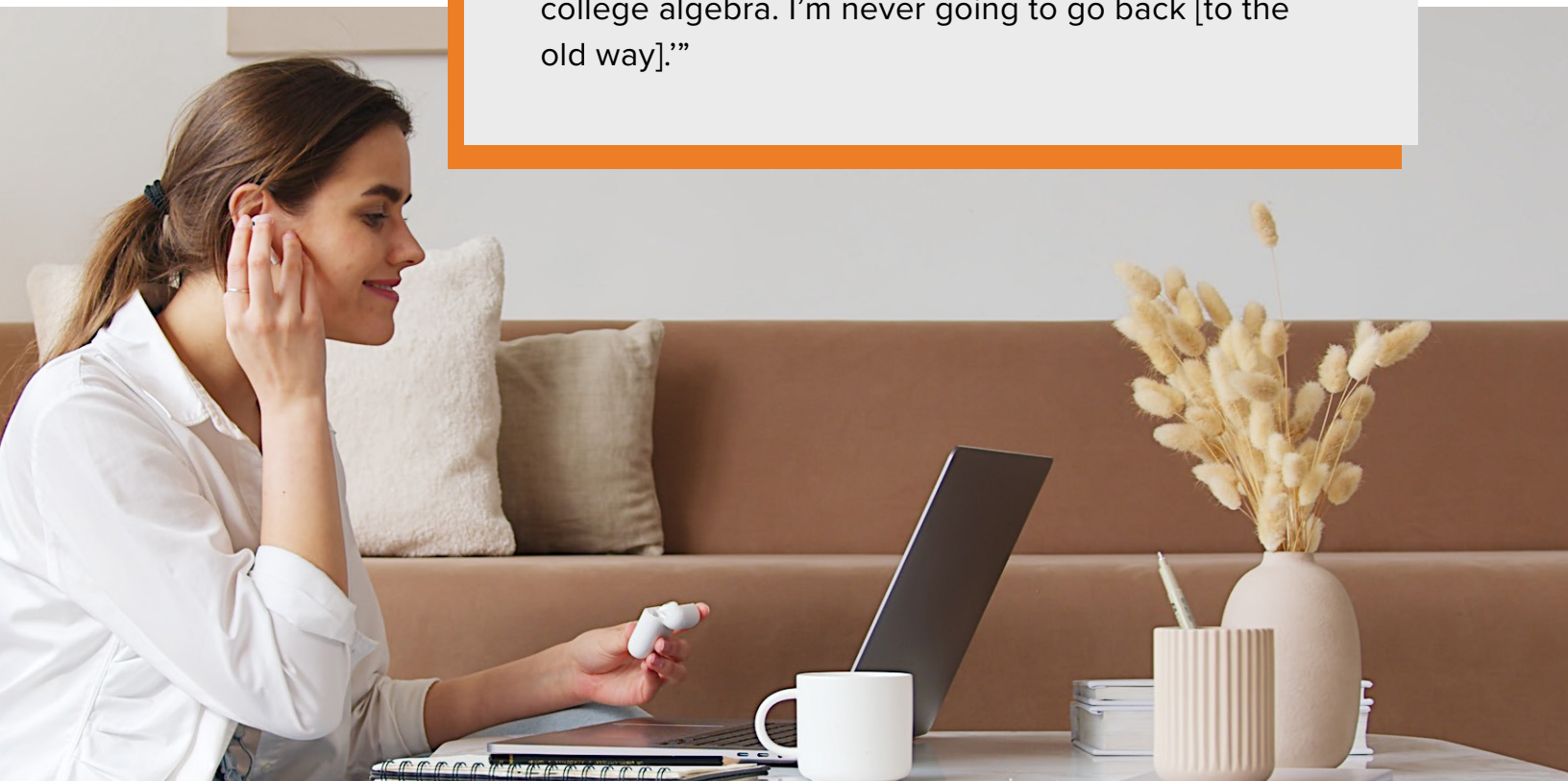
Despite recently redesigning most of their math courses to be online offerings, they quickly began re-doing them to include Knowmia’s interactive elements.

“This year they are focusing on re-building the math classes so they are ‘ready to go’ in an online format that builds in some of the things they’ve been successful at in the classroom, including active learning and collaboration,” Margot said.

Specifically, they focused on flipped learning. With the new easy-to-use video platform, even faculty who were initially skeptical of the model became supporters.

“I had an instructor come to my office and say that she hated the flipped classroom model, she just knew it was not going to work. She didn’t like the idea of using recordings and making video; it would take way too much time,” Margot related.

“She was tearing up in my office, she was so happy. She said ‘I have never had this much fun teaching college algebra. I’m never going to go back [to the old way].’”



After using Knowmia for a semester, the instructor was a firm believer in the power of video and interaction.

“She said, ‘I wish I had done this earlier,’ Margot said. “She was tearing up in my office, she was so happy. She said ‘I have never had this much fun teaching college algebra. I’m never going to go back [to the old way].’”

On asking about the instructor’s earlier concerns about the process taking too much time, she said that it does take time but that it was time well spent.

“She’s found it the number one thing that has made a difference, in all her years of teaching,” Margot said. “She found the time investment very, very worthwhile. So that’s just one example of how it’s working with instructors that are using it on campus.”

Instructors love the quizzing capabilities for interaction that appear at any point in the videos.

## Verify online participation

A significant factor in the success of flipping is the ability to measure participation online. Administrators and faculty specifically appreciate how built-in engagement within videos can check in with students and help see their progress as they go along.

“Knowmia has given us a way to verify that a student didn’t just click on a video and then walk away,” Margot said. “We can verify that the student is watching the material and paying attention to it, before they come to class. It’s been a game changer for us as far as supporting the flipped classroom model.”

Instructors love the quizzing capabilities for interaction that appear at any point in the videos.

“When we build in quizzing to keep them engaged and assign points for the video, that is a way to really ensure that students go through the material and spend time with it, not just check the box with no clue what they watched,” Margot said.





Instructors can also assign points for watching videos, to gauge and encourage participation.

“I know all of mine are watching them, or else they’re not getting class participation points,” Aaron commented.

Sending points directly to their LMS makes this even better.

“We love how the participation of the student in the video is measured,” Margot said. “If they only watch half the video, they only get half the points for that video.”

After using video without those metrics, the idea of being able to clearly see who’s watching is exhilarating.

“I’ve had faculty really have a laugh thinking about the new ability to verify video views,” Margot said. “If they assign 10 points to a video and the student only watches 20% of a video, they will only get 2 out of those 10 points. Instructors love it. It’s a way to really hold students accountable. That’s a standout feature.”

## Student view videos and interact

In both flipped and online courses, students appreciate the increased access to learn course concepts.



“Knowmia has given us a way to verify that a student didn’t just click on a video and then walk away,”

“A lot of students said they love being able to go back and watch the videos over and over again,” Aaron said. “The material is ‘always there.’”

In math, anatomy, and physiology — areas which must cover a lot of content in a short amount of time — students view videos multiple times beyond the initial view.

“There’s one particular course section that has 32 students, yet has more than 150 views of a particular video,” Margot said. “That tells me students are coming back to that video and viewing it over and over, to review the content and refresh the steps. That, to me, is a win. I love to see that.”

A marked improvement from the pre-made video resources some faculty had used before, the new video solution resulted in increases in the three key types of interaction.

“Knowmia is definitely helping us with two of those,” Margot said. “With Conversations, we’re building in the third.”



Conversations — an innovative way in Knowmia to interact within videos at any specific point in the content — along with quizzes and overall instructor presence, gives faculty what they need.

“Knowmia is a great way to offer more meaningful interaction between instructors and students,” said Aaron.

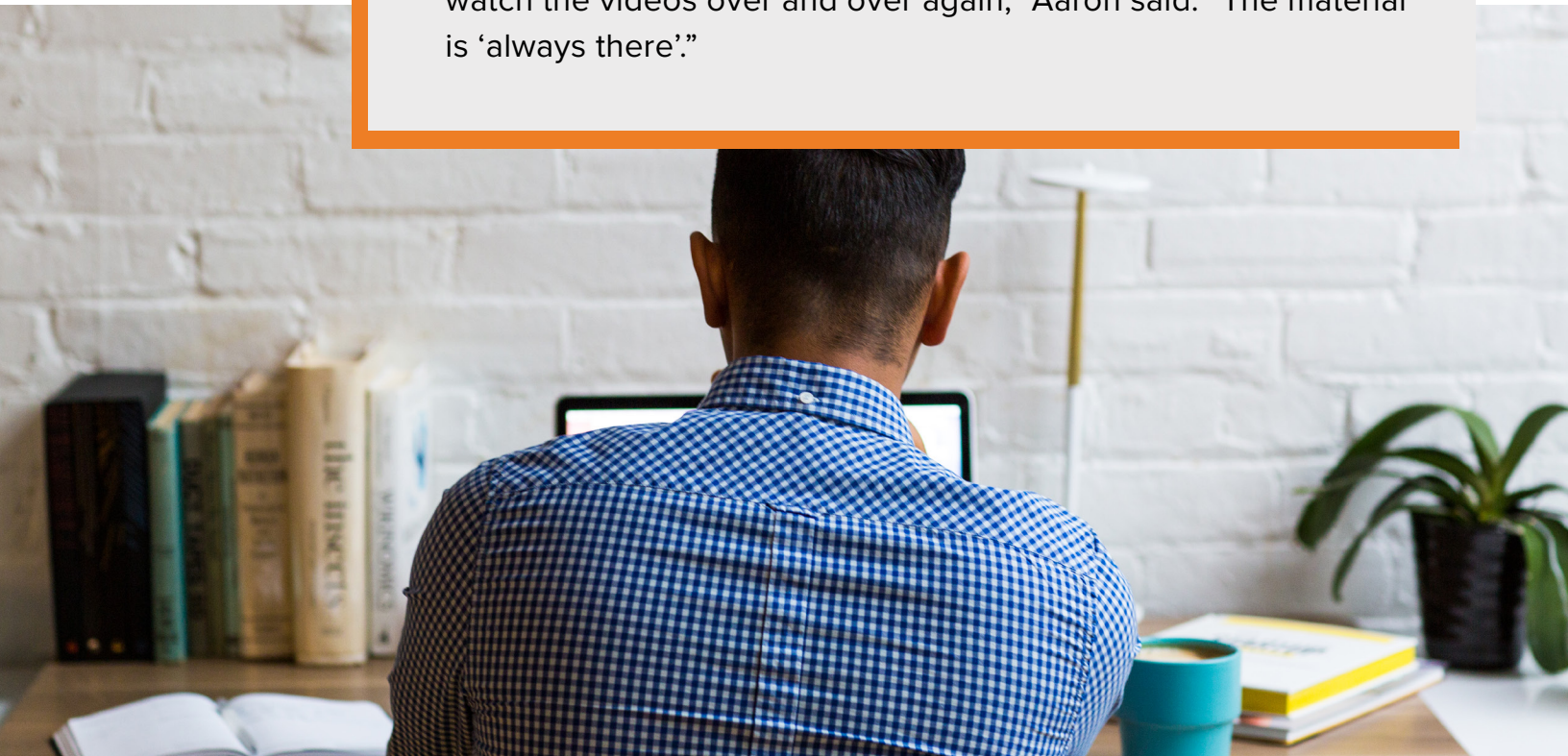
As video success grew, people outside the classroom began using Knowmia.

“Our accessibility resource center created a number of videos demonstrating sign language and asked how they could send these out,” Aaron said. “I suggested Knowmia, which was the first time I’d seen Knowmia live outside of BlackBoard. Our HR department recently contacted me and said ‘We want in on this thing.’ So even outside of the classroom I’ve seen a change toward full college-adoption as well.”

## Pass-rates up, especially for at-risk

In keeping with their overall goals, administrators measured student pass-rates against their baseline year 2014. Their benchmark was to increase all redesigned course sections by eight percentage points.

“A lot of students said they love being able to go back and watch the videos over and over again,” Aaron said. “The material is ‘always there.’”



“All of the classes that we have redesigned so far have met that benchmark,” Margot reported. “We have some [courses] that are blowing it out of the water. The ones who are using Knowmia are definitely where we see a lot more improvement.”

In particular, the videos and interaction of students in the anatomy and physiology classes are seeing good results. Struggling students are also among the ones most helped.

“The pass rate of ‘at-risk’ student success is higher. I like the way that those outcomes are looking,” Margot said.

To include student viewpoints, administrators are now in the process of doing a series of student focus groups and class evaluations of the redesigned sections. Built into those surveys are questions about video such as what students think about the quality of videos, and if they find them helpful. First up are anatomy, physiology, intro to biology, and college algebra.

“These are not normal end-of-semester student evaluations,” Margot said. “This is a survey that asks specific questions about the format of the class, and what aspects of the class they think are helping them learn the best. We look forward to having student feedback for that.”

As JCTC takes those findings and continues to iterate on its goal towards academic excellence, Margot expects to increase use of the best workflows, especially the ones that have made a big difference. “Knowmia definitely has,” Margot said.





# 10x

Adoption rate of TechSmith Knowmia, compared to Odessa College's previous video platform

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How much Techsmith Knowmia costs, compared to Odessa College's previous video platform



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## Fact Sheet

From the makers of Snagit and Camtasia

TechSmith Knowmia is a media creation and sharing platform that helps maximize student engagement in online and blended courses.

### Key Benefits:

- Easily create and share media. A web-based screen and webcam recorder is built in.
- Turn classes into active communities with in-video Conversations.
- Make content accessible with the most accurate speech to text available, audio description support, screen reader compatibility and keyboard supported navigation.
- ADA checker ensures captions meet guidelines.
- Enhance videos with integrated quizzes that measure student learning.
- Review analytics to understand who is watching and how much.
- Seamless LMS integration including Canvas, Blackboard, D2L Brightspace, Moodle and more.

"I integrated Knowmia into my summer GEOG 117 class and students LOVE IT!!! I LOVE IT!! I can't speak highly enough of Knowmia and the ease of using it!! THANK YOU!!"

– **Barbara Graham**, Professor, Physical Science Department - Geography, College Southern Nevada



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