



**Interactive
Classroom
Projection
from DLP**

Texas Instruments DLP®- based interactive projector unleashes new creativity in the classroom at CrossRoads Middle School



Bringing together approximately 1,000 students from 10 “feeder” elementary schools across Lexington and Richland Counties in South Carolina, the sixth-grade-only CrossRoads Middle School offers a nurturing but academically rigorous setting for students navigating the difficult transition from childhood into adolescence. It’s also a school with a continually growing interest in classroom technologies that can dramatically improve the learning experience. From a comprehensive website with instructional pages and resources for each teacher to the adoption of Google Apps in support of various classroom activities, CrossRoads administrators and faculty have a history of eagerly adopting technological innovations.

For one CrossRoads teacher, integrating technology into the classroom and curriculum has become a central part of his education mission. “When I first got here six years ago, my technology usage was limited, I guess you could say,” said Dr. Christopher Craft, sixth-grade Spanish and Latin teacher at CrossRoads. “At first, I only had an old-school overhead projector that used the old transparencies and spit out a lot of dust. I’m a naturally geeky guy, so I was eager to get any kind of upgrade. I talked to our tech person and she had an older-model DLP projector so I borrowed it. Just getting rid

of those overheads and the ability to use PowerPoint and videos – it revolutionized how I teach and made me eager to bring this paradigm to the next level.”

In 2007, Craft won a whiteboard after being awarded the the South Carolina Association of Educational Technology’s “Technology Innovative Program (TIPs) Award” program. He began to explore how to integrate the interactive whiteboard in his classroom. While the whiteboard was innovative, Craft nonetheless found that it wasn’t always suited to his curriculum and teaching style. “It troubled me that interactive whiteboards put the focus on the instructor,” he said. “It was frustrating to be the center of attention. I liken it to being a tour guide at the Louvre and standing in front of the paintings. And when I’d ask a student to come to the front of the classroom to touch something on the board, it felt forced and disruptive. And if I tried to use the mouse, it was very non-conducive to learning because I’d be hunched over a computer instead of among my students, learning with them.”

Client:

CrossRoads Middle School, a 1,000-student sixth-grade-only school.

Challenge:

Achieve new levels of classroom interactivity without requiring front-of-room lecturing or the use of a special board.

Solution:

InFocus IN3916 projector, based on Texas Instruments DLP interactive technology, providing exceptional clarity and visibility, “anywhere” projection, and wireless pen stylus for remote interactivity.

Results:

Teacher can move about freely, hand “pen” to any student for interaction right from their seat. The teacher is out of the way and the focus is on the content. Plus, easy no-calibration operation and no requirements for special projection surface. Also works as a traditional 2D projector.





Innovative interaction from Texas Instruments

Searching for a better way to integrate display technology in his classroom, Craft met with representatives from InFocus, which was introducing its IN3916 interactive projector based on innovative DLP technology from Texas Instruments. New DLP interactive projectors like the InFocus system make any surface in your classroom interactive, allowing an immersive experience that is not tied to the screen which helps teachers teach

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***Dr. Christopher Craft,
sixth-grade Spanish and Latin teacher
CrossRoads Middle School***

and students learn. Teachers can project onto existing projector screens or whiteboards or directly onto the wall. There is no need for a special display screen or special content.

The key to the interactive experience is a special wireless “pen” that you use to draw, point, and click even if you’re up to 30 feet away from the surface on which you’re projecting. Due to a unique pixel-level tracking system embedded in the beam, the projector always knows where the interactive pen is pointing without the need for calibration. That means teachers can interact with the entire screen no matter how large because the pen interacts from a distance. Teacher height reach, and shadows are no longer barriers to the interactive workspace.

Students can pass the pen to one another and interact with the display right from their seats. While DLP interactive projectors provide excellent levels of interactivity in the classroom, all of them can also function as standard, traditional projectors and can switch to interactive mode when needed.

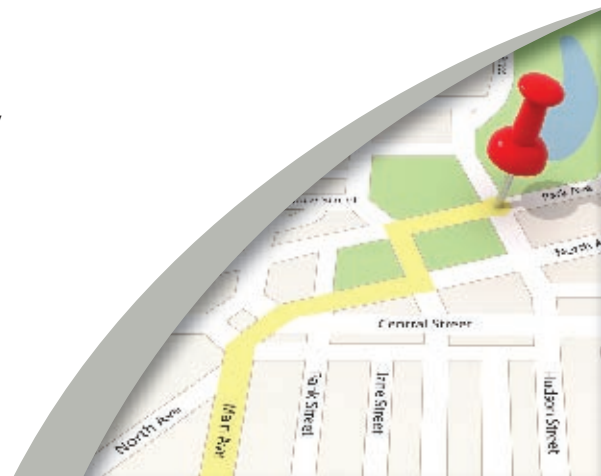
“When the folks at InFocus first sent me the projector to try, I immediately had a blast,” Craft said. “It makes every surface interactive, so we were using it on the floor, on the walls – just about anywhere. It completely changes the nature of interactivity because I didn’t feel tethered to the board and I could get out of the way of my content. We also have the crispest picture I’ve ever had. The resolution is excellent and large – even though I sometimes project from just 2-3 feet away. “My content was already naturally complementary to interactive instruction and there’s really no need for professional

DLP Interactive projectors are extremely versatile:

- Students can work math problems on the board from their desks
- Football teams can review video at halftime
- Students can take virtual field trips
- Students can collaborate on art projects

development or training to add interactivity to the curriculum. I didn’t need to adapt my lessons. I just hand the pen to my students – they think of it as an interactive gaming remote – and they use it like they’re writing with a large marker. We use free mapping software to take virtual field trips. In fact, one of our students is from Puerto Rico and he gave us a “tour” of his hometown.

“During presentations, we can annotate content and expand on our thoughts and ideas. I can live-narrate video – and the projector automatically lowers the soundtrack volume so that my voice can be heard. In fact, the projector has a really good set of speakers built in so there are no extras needed – and it runs very quietly as well.”



A more engaged, time-efficient class

One of Craft's favorite features of the IN3916 is the "Moderator" feature. With more than a dozen computers in his classroom, his lessons emphasize group collaborations. "Previously, if I wanted to

share the work of one student or team, I had to disconnect the computer I typically used for projection, connect a different one, and force the projector to search for a new source. Now, with the Moderator mode, I hit 'play' on the computer I want to project and soon, it's on the projected screen. It lets the kids show off their work and it brings their effort to a higher level. "InFocus and Texas Instruments have designed and built a projector that adds a new layer of interactivity and frees me from front-of-the-room lecturing. My students love it because they can focus more on the content. I've only had it for five months, but my history with InFocus and Texas Instruments and the glowing reviews I've read from other users collectively suggest to me that this will serve well for many years to come."

DLP Interactive Projectors Up-Close:

- Wireless interactive pen communicates directly with projected surface –point, click, scroll, navigate, write, draw, and more
- Direct touch screen interaction
- Circle, highlight, and underline any content while teaching
- Remote interaction -from up to 30 feet away
- Teacher is able to freely move about the classroom
- No special display screen needed
- No calibration required when projector moves

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www.dlp.com/edu

InFocus®

For an up-to-date list of DLP interactive projector brands, please visit www.dlp.com/interactive.