



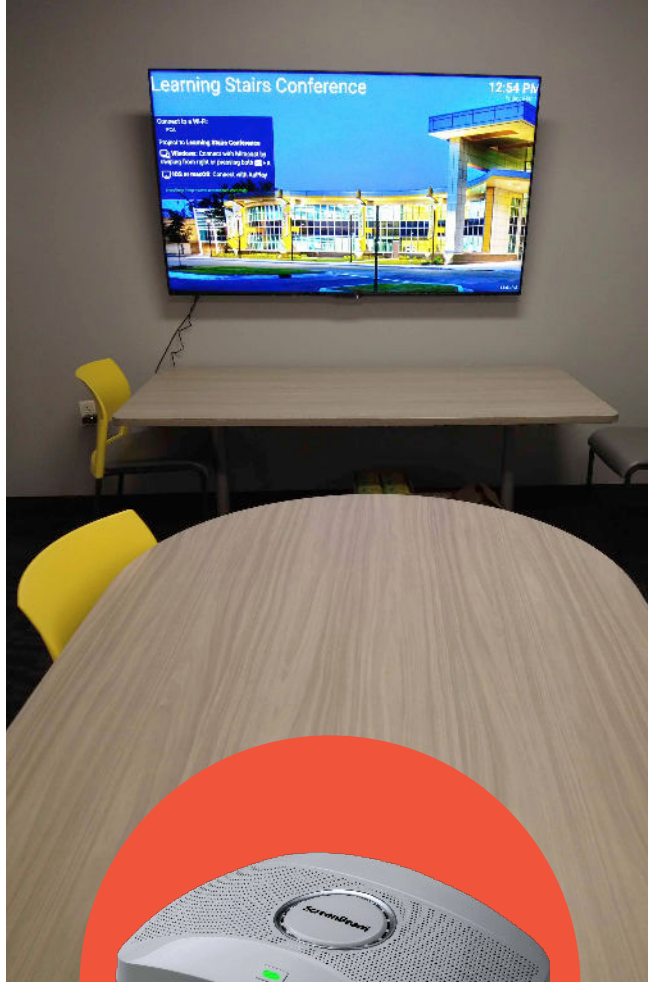
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Fostering Success

How to build a technology-enabled environment for successful learning outcomes.

Prepared by Wainhouse for

ScreenBeam®



Fostering Success

With educational institutions facing increasing challenges in today's climate, IT teams have been tasked with improving equity through technology. As explored in the case study of Palm Beach State College, decision makers must create a criterion for success that suits the population it serves. IT leaders need to consider how participants will interact with the technologies they implement while balancing institutional concerns for security and continuity. The focus on the user perspective has never been more important than it is today, with everyone, including young children, familiar with personal devices and productivity tools. To accomplish the underlying goal of creating successful outcomes, organizations and educational institutions are building flexible, technology-enabled environments.

The Flint Cultural Center Academy (FCCA), located in Flint Michigan, is a great example of an organization that is leveraging technology to foster adoption and engagement. This tech savvy academy was built through grants for a technology-centric education curriculum, even obtaining Microsoft Showcase status when it first opened in 2019. With the campus sharing a museum, cultural center, and K-8 charter school, the FCCA facilities are regularly used for meetings, lessons, and presentations. The unique nature of the multi-purpose campus meant technology leaders needed to address a wide array of use cases when designing the academy. Even with proper planning, initial reaction to the technology was less than enthusiastic as the user experience didn't match expectations.

After months of technical difficulties, FCCA set out to create the flexible environment users anticipated, leading to adoption of the ScreenBeam **1000 EDU** and **1100 Plus** throughout the campus, from classrooms to meeting spaces. To improve the culture and create consistent experiences, ScreenBeam's wireless display solution has been deployed across the campus. In doing so, teachers and professionals seamlessly move between spaces, better enabled to foster engagement from meeting participants and students. Since successfully adopting the ScreenBeam hardware, the academy has deployed the coinciding Classroom Commander software to monitor in-class work and improve student engagement.

In developing the FCCA technology stack, IT leadership prioritized the implementation of solutions that place collaboration at the center of the end-users' daily experience. Instead of the typical display with an HDMI® cable, every space across the campus is outfitted with an interactive display, a ScreenBeam receiver, document cameras, presenter cameras, microphones, and speakers. This tech centric approach is something the head of the academy, Eric Lieske, says was tied to the grants that made the academy a reality. With a focus on creating great experiences, Lieske relied on Todd Tiffany, director of technology for the academy, and his team to bring a techcentric curriculum to fruition.

From Friction to Flexibility

While the team at FCCA is pleased with the current state of the academy, this wasn't always the case. Tiffany expressed disappointment with the first iteration of in-room content sharing, which was being powered by a Miracast dongle well-suited for a single display, a single presenter solution.



“We had massive interference between each room and couldn't share video to the displays. It became frustrating for the teachers, causing them to give up and revert to USB connections. Once we recognized the limitations of the solution, it prompted us to look at enterprise-grade solutions.”

Director of Technology
Todd Tiffany
FCCA

Many of the classrooms found at FCCA are grouped into threes, like a three-leaf clover. This innovative approach to classrooms allows for more adults to be in each room and encourages collaboration between classes. While a great design for classroom collaboration, a new friction is created from this layout: wireless interference. The proximity of classrooms can cause interference when devices operate on the same frequencies. This interference reduces connectivity and creates errors when trying to connect to a consumer-grade wireless sharing solution. The resulting experience becomes increasingly frustrating for users and rendered FCCA classrooms unusable.

Beyond the frequency issues that Tiffany cited, FCCA noted limitations to the management of the consumer-grade Miracast dongles. The technology team couldn't remotely manage the devices, so every support ticket required a team member to manually address an issue. Ryan Castiglione, of FCCA Technology team, shared that servicing support tickets became a significant portion of the daily routine in the fall of 2019.



“It had become a constant battle with the consumer-grade dongles. This experience ruined the vision for the teachers to be dynamic within the classroom.”

Systems Administrator
Ryan Castiglione
FCCA

To deliver on the vision of FCCA, Castiglione led exploratory efforts for the campus, with a focus on user experience, remote management capabilities, and security considerations. ScreenBeam's 1000 EDU quickly became a top contender as it addressed FCCA's primary challenges while also offering digital signage and student device monitoring.

Tiffany and Castiglione are not only responsible for the academy, so the expanded capabilities of the ScreenBeam 1000 were tested and deployed across the museum and cultural center as well. While FCCA deployed the ScreenBeam **1000 EDU** initially, they have migrated meeting spaces to the **1100 Plus** for the ability to run video conferencing from presenter laptops. Since deploying a flexible, enterprise grade solution, FCCA has seen a drastic increase in the use of technology within classrooms and meeting spaces.

Driving Engagement

By deploying a solution that was built to connect users and spaces regardless of scale, FCCA was able to turn a bad experience into a model for others. The teachers at FCCA are incredibly engaged with their students, and many cited ScreenBeam as the tool that makes it possible. While touring the campus there were numerous opportunities to speak with teachers and observe classes and meetings, with all of them demonstrating how they utilize ScreenBeam to drive engagement.

Within grade school classes, FCCA teachers and students leverage the screen casting technology of the ScreenBeam daily to share content or stream educational videos that correspond to the curriculum. In addition, some teachers use the ability to connect with in-room video and microphone equipment for recording lessons or broadcasting a hybrid class. Each of the students has a laptop featuring Classroom Commander software assigned, making classroom management easier. The result is a consistent, reliable, technology interaction across all spaces.



“We use Classroom Commander anytime the students are doing group work, and often times they share content to the main display. We also have the kids lead a lesson through Classroom Commander.”

4th Grade Teacher
Heather Cichon
FCCA

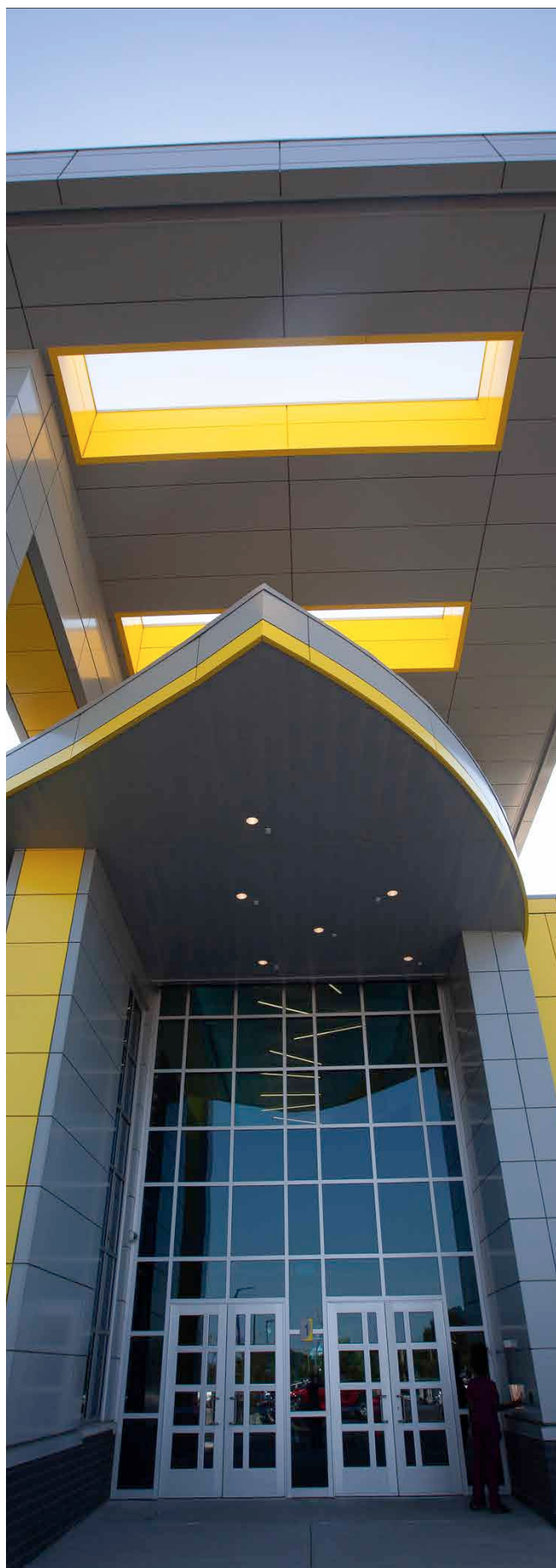
While classroom use was widespread across all grades, the meeting room applications showcased how engrained content sharing and hybrid technology is into the culture at FCCA. Chelsey Nolan, Principal for the academy, uses ScreenBeam for content sharing when she's in meeting rooms with students and parents. If a parent can't make it to the school for a meeting, Nolan initiates a Microsoft Teams meeting using ScreenBeam to connect with the camera, microphone, and speakers for a reliable hybrid experience. With the increased communication and transparency achieved through the ScreenBeam, the team at FCCA is creating an environment of success, and the proof is in the student engagement.



“Learning to use ScreenBeam was easy, and I picked it up on my first try. The kids found it easy as well and they all know how to press Windows key + K.”

Principal
Chelsey Nolan
FCCA

Students as young as first grade are more than willing to demonstrate how to use the ScreenBeam from their laptop to share videos, projects, and assignments, FCCA educators say. The connection between the students and teachers within the classrooms is evident from the moment you walk through the door. Through the use of ScreenBeam, the Flint Cultural Center Academy created an equitable environment where interactions with technology are consistent, so users are equipped to engage and contribute.



Thank You



About ScreenBeam

Since 2014, ScreenBeam has helped K12 institutions transform learning spaces into dynamic and engaging spaces for better learning outcomes. ScreenBeam's award-winning wireless presentation and collaboration solutions make it easy for students and instructors to connect over content, increase engagement and drive positive outcomes in the classroom.

ScreenBeam solutions are designed to be flexible for straight forward deployments while being easy for users on any platform. ScreenBeam readies classrooms for the future and adapt to new learning pedagogies like hybrid learning. Only ScreenBeam is Microsoft's co-engineering partner for wireless display. Headquartered in San Jose, CA, ScreenBeam has offices across the United States, Europe and Asia.

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