



**CASE STUDY: BRANDON VALLEY INTERMEDIATE SCHOOL
HERE, STUDENTS ASK BETTER
QUESTIONS AND LOOK AT
PROBLEMS DIFFERENTLY**



The middle school in Brandon, SD reached capacity in the fall of 2015. As a result, the Brandon Valley School District decided to open a new building to give its 5th- and 6th-graders new opportunities to learn in an effective, creative, positive, and safe environment.

Brandon Valley Intermediate School's mission is to prepare students to be lifelong learners and productive citizens through a positive learning environment with the cooperation of students, educational staff, parents, guardians, and community.

To support this mission, Nick Skibsted, Brandon Valley Intermediate School Principal, made sure every decision about the new building centered around three criteria: authentic experiences, mindful exploration, and purposeful engagement.

"We were in the planning stages of building Brandon Valley Intermediate School, and I knew a superintendent who was exploring a SmartLab HQ for his elementary school, so I started to research STEM in greater depth," he said.

Skibsted was intrigued at the possibility of giving students a different type of learning experience. "My main vision and purpose," he said, "was to provide kids with an opportunity to be challenged in ways they haven't before, especially for our middle-school kids."

When Skibsted stepped into a SmartLab HQ, he could see right away that his criteria had been met, and the team decided to partner with SmartLab Learning to bring a SmartLab HQ to Brandon, SD.

COMING TOGETHER TO CREATE A STUDENT-CENTERED ENVIRONMENT

Working with the SmartLab Learning team allowed Skibsted to turn his vision into a reality.

"When we started construction on the building, I didn't have any intentions on having a space built specifically for a SmartLab HQ. When we saw all that the SmartLab Learning program had to offer, we knew this was a great opportunity for our kids to experience a learning environment that aligns with what actually goes on in their world," he said.

After a year and a half spent gaining support from the school district and school board, Skibsted and his team received the approval to fund the SmartLab HQ from the general budget.

AUTHENTIC EXPERIENCES,
MINDFUL EXPLORATION,
AND PURPOSEFUL
ENGAGEMENT



"We had multiple meetings with our IT team, superintendent, and the operations manager to gather all of our needs and create the best experience for our students," he said.

DEVELOPING SKILLS FOR LIFE AND CAREER

A new school and a new program doesn't come without challenges. However, Mr. Mueller, the SmartLab's Facilitator, eliminated many obstacles by getting the community involved.

"Our students facilitated an open house for one of our in-services," said Mueller. There, the students showcased their projects to parents and district staff members. After they saw how learning was different for the students, the entire district began to explore new strategies for teaching. "We're a traditional district and it opened everyone's eyes to how we can engage students and how learning in a SmartLab HQ really is different," Mueller said.

"But for me, the number one thing is the engagement of the students, and the challenging aspects the program provides them," said Skibsted.

"We use this space as much as we can, and Mr. Mueller has created STEM camps and different programs as a result. When Mr. Mueller asked the students what they thought of a SmartLab HQ after completing one of the programs, a young lady said, 'it's like recess for the brain'—that's always stuck with me," he said.

EXTENDING THE EXPERIENCE BEYOND THE SMARTLAB HQ

Beyond engagement, the SmartLab HQ gives faculty the opportunity to enhance their classroom experience. Teachers outside of the SmartLab HQ have access to the SmartLab Learning curriculum, so students can bring the skills and concepts that they learn in the STEM lab into core classes.

"I think," begins Mueller, "that is the greatest strength of the program. It isn't necessarily the curriculum, but how you learn the curriculum and how you apply the curriculum.

"It's fascinating that I can tell which kids have been exposed to a SmartLab HQ when a core teacher and I discuss a student. That's because they learn differently here—and it carries over into the core classes."

For example, the teachers will say students ask better questions and are more likely to look at problems differently. "I think it's because of the journaling the students do every day in the SmartLab HQ. Kids say they're better writers in their ELA classes because I make them write at a high level here, and they apply that to their core classes," said Mueller.

Today, Brandon Valley Intermediate School is one of the most highly rated, public schools in the state.

Skibsted believes the SmartLab HQ provided the foundation students needed at this critical time for most fifth and sixth graders. "We're seeing curiosity amongst the kids and the parents as the students move on to higher grades," said Skibsted.

The goal now is to expand the SmartLab Learning program into other schools throughout the district. "Our students are moving on, and we are seeing changes in our district.

"How we look at some of our curriculum and how we challenge our students to explore different avenues—all of that has changed as a result of the SmartLab HQ," Skibsted said.

"Obviously CTE courses are becoming a big conversation in our district, so now we share some of our space with other schools.

"Sophomores are the first group to use this space in the morning. And as we continue to develop those programs, we find that the kids'



interests are ever-changing,” Mueller said.

GROWING THE PROGRAM BY BUILDING RELATIONSHIPS

The awareness and interest in STEM has grown throughout the community and neighboring cities. Now, the school offers STEM clubs, after-school STEM programs, and a new science center in Sioux Falls.

“Now, we want to focus on implementing STEM education in our elementary schools and beyond. We want every student to experience this type of learning,” said Skibsted.

Recently, the district approved a SmartLab HQ for their middle and high school students. And Skibsted is also looking for more ways for the community to get involved.

“We’ve been able to build upon our community partnerships because of the success of the program,” he said.

For example, when the students work on wind energy projects, he plans to invite local wind turbine businesses to participate in the project. Additionally, he’ll include other local agriculture and weather balloon companies in upcoming projects so students can

learn from and meet professionals.

“We will continue to grow these community partnerships and build student experiences that are more career or job specific,” said Skibsted.

The engagement inside the SmartLab HQ is also involving the community and parents.

“We are a young community and when kids talk about the SmartLab HQ, the parents want to learn more. This opens more opportunities,” said Mr. Mueller.

Now, the possibilities are endless for the students at Brandon Valley Intermediate School.

“In a perfect world, I want the SmartLab HQ to be the center hub of the school. After year one, Mr. Mueller and I moved the SmartLab into our library and flip-flopped it. No matter where you are, you have to walk by the SmartLab HQ. The room is surrounded by windows so you can see the engagement and excitement for learning—and that’s exactly what we wanted to achieve,” said Skibsted.

Although funding in schools is always a topic of discussion, Skibsted saw a SmartLab HQ as an investment for the kids and the community.

“The SmartLab HQ has improved so many things in our district. Conversations are different now when we talk about what students are doing— even after they move beyond this building and go on to high school. We didn’t want to have STEM sprinkled into classrooms here and there—we really wanted to bring it all together and put students at the center of everything we do,” he said.

Before opening the SmartLab HQ to students, the team at Brandon Valley Intermediate School spent 3–4 days getting trained and oriented to the new learning environment.

“The SmartLab Learning team provides an orientation and also ongoing support—it’s just a phone call or an email away. So if I were to run into any problems, they’re very supportive,” said Matt Mueller, SmartLab Facilitator at Brandon Valley Intermediate.

However, Mueller and the entire team views ‘problems’ as just part of the learning experience.

“If you can train yourself as a facilitator to overcome obstacles, then you’re going to train the kids that way ... it’s all part of the learning experience,” he said.

So any time Mueller or his students experience a ‘problem,’ they’re taught to find a pathway to get through that problem and overcome it.

