

THE PITSCO NETWORK

August-September 2016

Ki Charter: more than an experiment

STEM hits the mark at Texas residential treatment center
page 14

Grant novice nets \$135,000

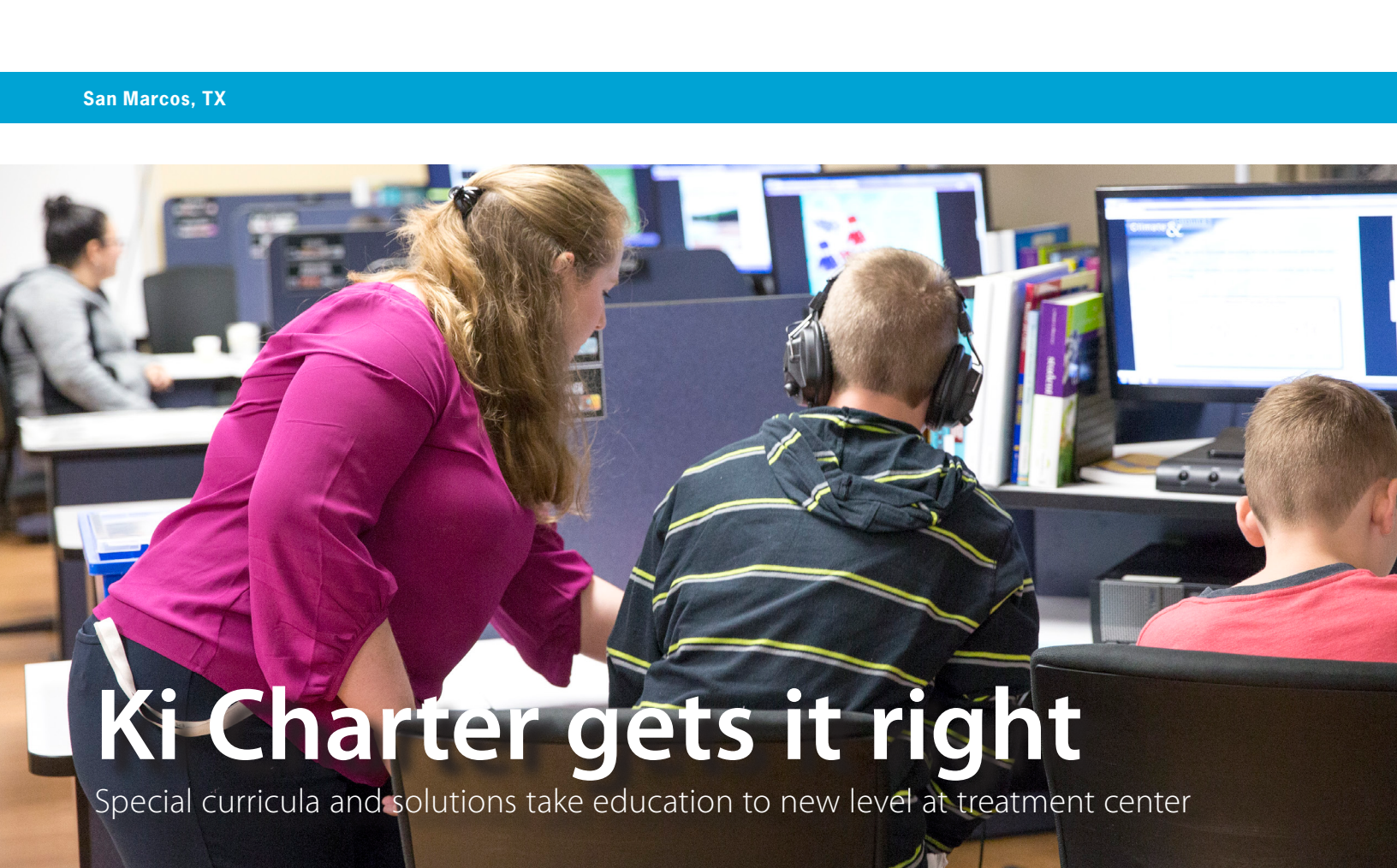
page 6

Student: 'Careers I never knew existed'

page 12

SySTEM Alert!: Engineering Design Process

pullout



Ki Charter gets it right

Special curricula and solutions take education to new level at treatment center

By Tom Farmer, Editor • tfarmer@pitsco.com | Photos by Melissa Karsten, Online Marketing Coordinator • mkarsten@pitsco.com

SAN MARCOS, TX – The long, drawn-out experiment is over at San Marcos Treatment Center. A succession of charter schools, each touting a host of surefire programs aimed at helping perhaps the most challenging student population, has given way to Ki Charter.

By all accounts, from SMTC officials to teachers to students, Ki Charter achieved the kind of success in its first year that every school strives for, not just those that service youth treatment facilities. The turnaround started a couple years ago when Jerry Lager, Philip Muzzy, and a few others decided they could do better than the schools for which they had worked as staff, teachers, and administrators.

Part of the planning that went into their 400-page charter school application was a firm decision to seek out only the most appropriate and effective curricula and solutions for the special student population at SMTC.

"The number one nonnegotiable right off the bat is we wanted a multisensory approach to math and science because a special population is tactile and hands on, and we needed to get them engaged," said Muzzy, who serves as Ki Charter's associate principal. "You have the autism spectrum disorder, you have the emotionally disturbed, you have the ADHD, and all these things. We see literally everything, so we need programming that will address the needs of these kids. It's a special combination."

After countless hours of research, Pitsco Education's science and math Modules for middle and high schools and STEM Missions for elementary

school were tapped to supplement core courses, Read 180 was selected as the reading program, and special furniture was purchased that enables students to move and stay active in the classroom.

Math teacher Rachel Tyler had worked for three years with the previous charter school at SMTC, which is the largest residential treatment facility of its kind in Texas. "I like the math Modules in the lab compared to other programs I've seen because a lot of others seem repetitive, a lot of drills. In this lab, the Modules give students insight into what's going on in the real world and how it's actually applied. . . . When they have a hands-on approach, I see them focused a lot more. When they have something visual and they're hearing it at the same time, they focus better. The lab with the Modules combines all learning styles into one, and they get that every single day."

DATA CONFIRMS STUDENT GAINS

Lager, Ki's superintendent, has seen a lot during 15 years working in youth residential treatment facilities. He has learned to quickly discern what works and what doesn't. The Pitsco program passed Lager's eye test when he saw it in action at public schools with traditional student populations that were fully engaged, but part of him remained skeptical until he could see the numbers – the test results.

Acknowledging the nearly insurmountable challenges that SMTC students are transient – the average length of stay is 110 days – and they have usually failed at multiple schools and programs before



At far left, Ki Charter science teacher Kristen Dunn helps student partners working through a Pitsco Module. At left, students take advantage of the special classroom furniture that enables them to stay active while still listening to the teacher. Above, a Ki Charter student gets a close-up look at an object under the magnifying glass.

landing at SMTC, Lager was surprised in fall 2015 to see data showing that 64 percent of students showed growth or maintained their performance between pretest and posttest assessments, and only 36 percent showed regression. These results flew in the face of what had come to be expected from the Grades 6-12 students at SMTC.

"Our students are excited to use the lab. In part, they are here with us because they have been unsuccessful in a traditional classroom environment. The combination of our student rapport and the Pitsco experience helps our children reawaken their love for learning," Lager said.

Instructional Coach Drew Nudd is in charge of tracking test results and program data and, like Lager, he was initially unsure about the Pitsco program because SMTC students pose unique challenges in the classroom.

"When they come in, they have their guards up. This is just another place. This is just another program. We have to break through these barriers and foster those skills for the kids to gain the confidence necessary to feel OK about taking risks and challenging themselves," Nudd said. "The numbers are telling me the children are responding to the program. Overall, the kids from pretest to posttest are gaining the knowledge. Children are starting to become invested in the program."

MODEL SCHOOL GRABBING ATTENTION

San Marcos Treatment Center CEO Mack Wigley smiles broadly when asked to explain the difference between Ki Charter and other education providers who have served the facility in recent years. "Kids

like school now," he says. "The kids talk about school. It's kind of odd having kids talk about school. Usually, before they come here, their main focus is managing their behaviors and treatment. However, school is a critical component of the treatment process. It's not an afterthought anymore. It's an integrated piece. . . . The Pitsco lab is a great asset in terms of kids working together. It's a nontraditional, nonlinear way of learning."

The San Marcos facility is one of more than 230 Universal Health Services, Inc. treatment facilities in the US and the United Kingdom. UHS President of Behavioral Health Division Debra Osteen visited SMTC last fall, and after touring Ki Charter classrooms and labs, she asked Wigley to present a session on the school's success with Pitsco STEM and other solutions during the organization's annual gathering of CEOs in Philadelphia.

Ki's attention to detail and high expectations for results helped it earn a charter on its first attempt and then move education at SMTC from mediocre to model. Lager and company will take a similar, cautious approach to the growing number of opportunities to expand its reach.

"We're getting calls left and right from folks, but we're not expanding until we are fully ready," Lager said. "We want to show professional, responsible growth. We don't want to water down our programming. We want to make sure that if we expand we send the right people to get it going." **P**



Students in treatment respond to active learning

Module experience also exposes students to real-world tasks and variety of careers

SAN MARCOS, TX – Even before he was a teenager, Wilson knew well the hardships of poverty in his native Puerto Rico. While his parents tried to mask their frustration, Wilson and his brothers felt the tension. He needed to help his family however he could, so he quit school to find a job.

But quitting school proved the first step toward bigger problems for Wilson. He was eventually sent to the San Marcos Treatment Center (SMTc), where he was unable to speak the language and found himself surrounded by strangers. That was more than five years ago –

seemingly a lifetime to Wilson – and his life has changed dramatically since his arrival at the largest residential treatment center in Texas.

Now fluent in English and working full-time while planning to take classes at a community college, Wilson is leveraging the skills and knowledge he acquired at SMTc, including the content he experienced this past year in the Pitsco Education career-centered STEM lab.

“I learn more when I see it. So they show you and give you an example of how to do it, and that really helps me because that’s



Having the opportunity for tactile learning helps students with special needs stay better focused on their assignments at the San Marcos Residential Treatment Center. At far left, Dusti and Joseph study DNA at the Genetics Module. At left, Ki Charter Superintendent Jerry Lager listens to Wilson, sitting, and Jimmy talk about an experiment in the Pitsco science lab.

how I am – I'm a fast learner when I see something. You give me one example, and that's all it takes."

Learning by doing and seeing has been a foundational underpinning of all Pitsco STEM curricula, activities, and materials for the past 45 years. It's what prompted Ki Charter Superintendent Jerry Lager to make the Pitsco Modules lab one of the cornerstones of his curriculum at the school catering to special-needs, at-risk students.

"I really wanted to marry the theory-to-practice approach with kids," Lager said. "You'll learn the theory of parabolas in math class for two weeks and then you'll apply it in a lab and see how it works. I knew that would be way more effective. Our whole approach to starting the charter was choice – give kids choice."

The hope is that students, because of their positive experience at the treatment center, will eventually choose to complete their education just as Wilson and his classmate Jimmy did when they were the only graduates from SMTC in May 2016.

STUDENTS CONNECT THROUGH ACTIVE LEARNING

Science teacher Kristen Dunn was surprised by how effectively the Pitsco curriculum engaged students and helped them make connections with science concepts they might otherwise have glossed over.

"My favorite part is they'll be in the classroom doing something, and they'll say, 'Oh, in Pitsco lab we learned about this, and I remember we did this experiment and this is what it said,'" Dunn explained. "They get all excited. They get to share their knowledge with the class. I really didn't expect that to happen."

That desire to share extends beyond the walls of Ki Charter and SMTC. With a renewed sense of purpose, Wilson, Jimmy, and other students want to help not only their classmates but also their family members discover a better path in life via education.

"I have four brothers, two older and two younger," Wilson said. "The younger ones never liked school, but now that I'm going to school, they're going to school. That's my place in life – to help my brothers."

Jimmy, who battled with issues of anger, drugs, and gang affiliation in Houston early in his high school career, said his two-plus years at SMTC have positioned him to pursue a career in civil engineering. As one who appreciates a methodical approach to learning, Jimmy particularly enjoyed the math-focused Module content.

"The way (the Modules) went through it, I got to work step-by-step and see the improvements I'd made because they had follow-up questions to help make sure I understood what was going on," Jimmy said. "We had teachers who would come by and help us if we didn't understand it from the computer, and it just helped me get the equations and all that squared away."

Likewise, Joseph from Arizona found in the Modules a deeper understanding of his favorite subject, science. "I love the sciences. There's science all around us, there's science in us, there's science on us," said Joseph. "There's a lot of hands-on labs we can do (in the Modules), and the sessions break things down concept by concept, detail by detail, and then that's applied to the experiments and labs they have us do – using microscopes, dissecting things."

Dusti from Louisiana said the Pitsco curriculum has opened her eyes to the relevance of education, just in time for the 17-year-old junior to return home following her treatment and finish her high school education. Her plan before arriving was to eventually drop out and get a GED.

"It shows you that you can do whatever you want, and what you're learning in school does help," Dusti said of her Pitsco lab experience. "This math and science comes together and opens up a whole new world. You're learning about real jobs that are actually out there, and it shows what kind of jobs. It's cool because a lot of us didn't know about these jobs." 



Jerry Lager

Superintendent,
Ki Charter, San Marcos (TX)
Treatment Center

Ki Charter provides education services for the San Marcos Treatment Center, the largest such residential center for children in the state of Texas. Students from throughout the United States and abroad receive treatment at SMTC for a variety of conditions and issues including severe ADHD, autism, anger, depression, and other social disorders. Ki Charter Superintendent Jerry Lager and Associate Principal Philip Muzzy applied for and received the school charter on their first attempt in 2015. The two men bring many years of experience as treatment center workers, school teachers, and administrators. In May 2016, Lager answered a host of questions about his unique school and the heavily researched curricula used there, including Pitsco Education Missions and Modules.

Administrators' Corner

Ki Charter: 'Give kids choice'

Students in residential treatment facility have wide-ranging special needs

Tell us about the San Marcos Treatment Center.

This is the largest residential facility in the state of Texas with max capacity at 210 children. We might have 200 kids at any given time in Grades 1 to 12. However, we see about 1,000 kids a year and they come and go. They sleep here, eat here, go to therapy together, and have activities together. The average length of stay is about 110 days.

What are the academic challenges at this type of facility?

We have kids from all over the country and all over the world. The challenge goes even deeper because the registrar, the principals, myself as superintendent – we have to go through these kids' records and put them in courses that will count in their states. Those are the challenges we deal with. We have to be prudent in what classes we are putting the kids in so it counts for them in the future.

Why did you want to open your own charter school after working in the charter that previously serviced SMTC?

These are kids in a treatment center. Things didn't work for them in a regular school system. Why are we doing that here for them? They get kicked out of regular school, kicked out of disciplinary school in their district, kicked out of in- or outpatient care, and then they come here. These are the toughest of the toughest kids. Some charters don't put a lot into their facilities because the bottom dollar is the bottom dollar. For us, the bottom dollar is the child. How are we going to be an intervention for those kids? That for us is the biggest thing.

Why did you choose Pitsco Missions (elementary) and Modules (junior and high school) as the STEM solutions?

A nonnegotiable for me was to provide a STEM lab for the kids. I was a very hyper ADHD kid, and (teachers) would have to send me to the track outside. I didn't want to sit through a lecture. These kids have a lot of those same issues. How are we going to get them to enjoy school again when it didn't work in

their past? I really wanted to marry the theory-to-practice approach with kids. You'll learn the theory of parabolas in math class for two weeks, and then you'll apply it in a lab and see how it works. I knew that would be way more effective. Our whole approach to starting the charter was choice – give kids choice.

What makes your teachers well suited for Ki Charter?

Charter law says teachers don't have to be certified, just highly qualified in their content area and have a bachelor's degree. All of our teachers are certified. We set the bar high – everybody has to be not only a certified teacher but a special ed-certified teacher as well because we have a 60 percent special ed population. We went through a rigorous process to select teachers. The big question on our list – "Do people really want to be here?" This is not just a paycheck, it's a tough job. If you can be a good teacher here, you can be a good teacher anywhere. It doesn't work the other way around.

Can you give a specific example of a student making significant progress in one of the Pitsco labs?

I had a student from Dallas with severe ADHD, and he could not sit still, he could not concentrate, he could not do anything. One day, I walked in with his insurance reviewer. She walked in, and he was at the Module dissecting owl pellets. The lady looks at me and says, 'That's my kid who's been kicked out of three schools. What's he doing?' Well, he's dissecting owl pellets, he's learning. She was like, 'How did you get him to do it?' We didn't get him to do that. It's a self-engaging program, and the teacher is just facilitating. It's pretty cool to see that.

What are SMTC officials saying about Ki Charter's services?

The CEO of the facility, Mack Wiggley, came down to talk with our teachers during teacher appreciation week and told them we've reduced the behavior incidence and physical hold rate by 80 percent. That's engagement! . . . The president of Universal Health Services came to see our school last September. She told Mack to put together a presentation on Ki Charter for all facility CEOs to see at a meeting in Philadelphia. 



ONLY ONLINE:

Visit www.pitsco.com/Network to read more of the interview with Jerry Lager.