



 **SCIENCE ADVENTURE SCHOOL**

Stories of Impact

  

UNIVERSITIES UNITED





Stories Of Impact

Inspiring moments from Science Adventure School's 2023 season, written by our staff.

Student names and photos have been changed to respect their privacy.



STRUGGLING STUDENT LEARNS TO RIDE A BIKE

Brayden's teachers had warned us that he was a "bad student." I noticed that he was restless and inattentive during lessons and instructions. But my impression of him changed as we began our BMX class, in which students practice riding bikes over ramps and small obstacles.



Brayden reluctantly pulled me aside and told me that he didn't know how to ride a bike at all, and was very anxious about learning how in front of his peers.

I spent the next hour with Brayden, showing him how to transfer his knowledge of riding his scooter at home to the bike – he called this the "scooter method." And it worked! He went from not being able to pick his feet off the ground to riding in circles around the parking lot, and he was absolutely elated.

When I later asked Brayden how he felt about his new skill, he told me, **"All of my teachers and my parents stop trying to teach me how to do things after a little bit,** and you were the only one that's tried to help me learn to ride a bike." He began to cry tears of joy and added, "I've always wanted to learn how to ride one, and now I want to save all my money to buy a bike later." Hearing this, I told Brayden's teachers about programs that provide free bikes to students in West Virginia. Though I will never know if Brayden finally got his bike, I like to think he has found some outlet to enjoy the outdoors and smile just as he did on the bike at SAS.

COREY FINDS HIS VOICE

Every week when they arrive at Science Adventure School, students are responsible for deciding which good traits, qualities, and behaviors that they would like to uphold during the week. This list becomes what we call a Full Value Contract, or FVC. The students write these expectations on a blank white bandana, then sign their name and agree to live by the FVC.



One week, I decided to have my students vote on who they thought did a good job at demonstrating the traits on the Full Value Contract. The student with the most votes got to hold onto the FVC bandana for a while before passing it to another deserving student. In this particular group, there was a boy, Corey, who didn't really speak much—maybe one to three words at a time. His teacher and friends said that he was like this at school all the time. At the end of the second day, this quiet boy was chosen to hold the FVC.

The person who chose him explained why they picked him, and the whole group cheered and clapped and all talked about how great he was. **"You deserve it, Corey!"** His smile was so big. I could really see that this moment helped Corey get out of his shell, and I think it really made his week. From then on, he spoke in longer sentences and would talk to me

and other staff more, as well. I saw him come to the program very reserved and not really talking to anyone, but by the end I could tell that he made some friends and was stepping outside of his comfort zone in a really great way.



BIKING CREATES BELONGING

Of all the students who I taught to ride a bike, the one that stuck out to me the most was Shawn, especially because of what happened afterward. In a matter of two hours, Shawn went from not knowing how to ride a bike to going down every single BMX ramp and track. It was amazing to see his persistence and willingness to keep trying. He never complained, quit, or lost focus on his goals. Until that day, Shawn had always sat away from his classmates at meals. But immediately after his experience at BMX, **Shawn started sitting with the group for every meal.** The confidence he found on a bike spilled over into his interactions with his peers. Shawn proved how our style of experiential education can be a vital tool for personal development.

RILEY FACES THE ZIP LINE

It had been a very cold week, but the Friday peak experience had finally arrived: the zip line canopy tour. The boys were STOKED. The girls were nervous, hesitant but shyly excited. Riley was terrified. Usually bubbly and excited, Riley had struggled to connect with other students that week.



Their group was rambunctious to say the least, a gaggle of mostly rowdy boys who already seemed to share a dynamic and inside jokes with each other. Riley tried their best to fit in, but always seemed a bit more at ease when left alone. And now, facing the zip line, Riley moved to the back of the line.

The students zipped through a few at a time, stepping off the first platform and disappearing into the trees. Riley was the last to approach the platform. The guide clipped their harness to the line. Standing on a little step stool, looking down off the edge, Riley froze. Riley was still standing there when the first students returned from the end of the zip line tour. Full of adrenaline, the boys raved about how much fun they had. Then they noticed Riley, still up on the platform with the guides gently trying to coach them through. Immediately, the boys knew what they had to do. They ran over to the path under the platform and started cheering Riley on. "You can do it, buddy!" they shouted. "We support you!" A few at a time, the rest of the students noticed their teammate frozen in fear on the platform, and they joined in the cheerleading.

Pretty soon, all 15 of Riley's peers were there supporting them. They encouraged, they offered their perspectives ("If I can do it, you can do it! It's not as scary as it seems!"), and they even bribed.

"If you go on the zip line, I'll give you my handwarmers!" The Hot Hands handwarmers had been a hot commodity on this cold week, and several students had been safeguarding theirs in their pockets. This caught on, and eventually every student was promising Riley that if they went down the zip line, they would be the recipient of 15 handwarmers. The students cheered, they supported, but they didn't push. That was what surprised me most while I watched the scene unfold. The students were not annoyed that it was taking so long. They were not exasperated that they were still there, standing in the cold, waiting for the last group member. They just showed pure love and support.

"We love you, Riley!" they shouted, as Riley finally stepped off the platform.

A while later I found Riley sitting by the fire, proudly sporting 15 handwarmers in their lap.

"The students cheered, they supported, but they didn't push."



"I NEVER WANT TO LEAVE WEST VIRGINIA"

To celebrate the final night of Science Adventure School each week, we host a campfire with skits, songs, and s'mores. At the end of the campfire, a SAS staff member shares a story about how living in or moving to West Virginia has transformed them, emphasizing the natural beauty and opportunities in West Virginia. Finally, we all sing "Take Me Home, Country Roads" together in the firelight.

One night during "Country Roads," a student named Aiden began intensely crying. While his teacher consoled him, he simply said, **"This is the most beautiful thing I've ever seen. I never want to leave West Virginia."** Later, the teacher shared with us that Aiden had only recently moved to West Virginia, and that the teachers had never heard him speak up in class as much as he had at SAS. The teacher then continued to say, **"I haven't been able to make an impact like this with a student in the past ten years that I've been teaching middle school. This is the type of experience students need, to really want to stay in this state and be passionate about it."**

I believe that this teacher truly felt a renewed spark to empower students in his school that day, and I believe that SAS can empower youth, teachers, and the rest of their community in turn. I hope that all students in West Virginia will one day get the chance to experience "Country Roads" by a campfire, like Aiden and his teacher did.



BRAD AND ALYS SMITH OUTDOOR ECONOMIC DEVELOPMENT COLLABORATIVE

HANNAH BECOMES A SCIENTIST

One week at SAS, I saw a student transform after our visit to the New River Gorge National Park. At the beginning of her week at SAS, Hannah was extremely shy, never wanting to speak out in a group. She often followed along with whatever her classmates said or chose to do, rather than deciding for herself.

This was the case up until our visit to the New River Gorge, when we spent an hour catching macroinvertebrates in Dunloup Creek. Hannah ran up to me with her net, excited to talk about what she caught and how much fun she had identifying them all. Next, the park rangers taught the students how to test water quality, using fancy testing equipment and chemicals. It was the first time these students had ever conducted experiments using chemicals, and it was clear that they all thought it was such a cool thing to do. Trusting youth with expensive tools and actual chemicals shows that they are valued and respected, and it can boost their confidence as well. It certainly did for Hannah—gone was the shy student who had expressed little interest in our classes. Now, she proudly told us, **she plans to buy her own water testing kit to conduct experiments at home.**

I really feel that this experience at SAS opened up a new perspective for my students, one where they could see themselves as scientists in their own West Virginia backyard.



ELI REFLECTS ON CANOEING

“Ryan, I wasn’t a good friend to you during canoeing today. I’m really sorry.”

Eli was a gregarious member of our group who was well liked, but who sometimes talked down to other students. During paddling class, Eli shared a canoe with Ryan, a classmate who he seemed to like, but with whom he sometimes fought like siblings. Soon, we heard arguing from their canoe. As they struggled to paddle in a straight line, Eli loudly blamed his friend. Tensions rose rapidly, so we Guides offered tips to improve their paddling. After a bit more squabbling, the kids seemed to smooth it over, and the rest of canoeing class passed without incident.



I thought nothing more of it until that evening’s discussion, called “Handling Failure.” The students were invited to share stories of personal failures, then celebrate what they had learned from the experience. Several students shared their shortcomings from the week, such as missing the archery target, getting stuck on the rock wall, and being afraid of crawdads. When it was Eli’s turn, he looked Ryan in the eye and said, “Ryan, I wasn’t a good friend to you during canoeing today. I’m really sorry.” When given the chance to reflect, surrounded by his classmates, Eli realized his mistake and made the choice to grow through it.

ROCK CLIMBING HELPS HARPER THRIVE



One week at SAS, a student named Harper struggled to engage with the activities and with her peers. Harper told us that SAS was just “a lot to take in”—everything was new for her. We supported her as best we could, and things seemed to be going well enough, but Harper still seemed overwhelmed a lot of the time, often on the edge of a breakdown.

Our last activity on Thursday afternoon was rock climbing. Together as a group, we went over all the safety instructions and began to get students comfortable in the harnesses and on the auto-belay systems. Immediately, Harper seemed transformed by the rock wall and was so eager to get through the safety instruction. As soon as she was able to try climbing, she really went for it! We watched, shocked, as she worked through many different climbs on the wall and challenged herself to take on the most difficult route. **Harper had finally found her language for the week**, and it was rock climbing! Climbing was where she took command and found confidence to focus on the challenge and move through her frustration. Best of all, her classmates cheered her on from below. It was such a great moment to witness. I’m glad that SAS provides an environment for youth to find their power and their niche.