Miracles happen on a daily basis in the Assistive Technology (AT) Lab at Utah State University. Part of the Utah Assistive Technology Program (UATP), a project of the Center for Persons with Disabilities, the AT lab provides high-tech and low-tech items that help increase the quality of life for individuals with disabilities. This includes mobility aids such as crutches, walkers, wheelchairs, power chairs and scooters.

Oh, and then there’s the saddle.

Several months ago, a man approached AT Lab Coordinator Clay Christensen about adapting a saddle for his 14-year-old grandson, Michael.

“I said I would do the assessment if the father and grandfather would do the rest,” Christensen said. “I was concerned about liability issues, but I really wanted to help the family. As I’ve said in the past, we’ll try anything once. This is kind of the essence of what we do, these projects.”

Michael has cerebral palsy and uses a wheelchair. And he loves to ride his horse, Carmel. Stepmom Wendy Kunz said Michael is always happiest when he’s on a horse, but as he grows, it gets harder to get him up on the horse and keep him there.

“Karmel is ginormous, but she really likes him a lot and she’s really good with him,” Wendy said. “She gives him big slobberly kisses.”

The solution is a western-style saddle with a sturdy backrest attached. The saddle horn has been removed, and pads have been added to position Michael’s legs correctly.

“It’s really important to remind him to sit up straight,” Wendy said. “When the horse moves, it will help stretch the muscles in his hips. With time, he’ll start to straighten up on his own. He tries so much harder when he’s on the horse to activate his core and back muscles—he has them and can use them, he just needs to develop them.”

To test-fit the saddle, Christensen set it on a cooler on the lab’s concrete floor. Michael was transferred from his wheelchair to the saddle, then secured with a wide strap around his torso.

“See what he’s trying to do?” Christensen said. “His hips are in a really good position.”

Wendy noticed more than just the position of Michael’s hips.

“You have a big smile on your face!” she said to him.
Later that same day, Christensen and his assistant, senior social work major Cameron Cressall, headed to the Cache Employment and Training Center, a day program for adults with disabilities in Logan. They did an assessment for Jason Christensen (no relation to Clay), a young man who has cerebral palsy and uses a wheelchair.

Jason has submitted paperwork for a new wheelchair, but the process is slow.

“The chair is just completely wrong,” Christensen said. “The back is too thick, the tires are worn to the cords, the axles are broken—it’s literally held together by baling twine.”

One of the problems with Jason’s chair is that it can’t recline, and that’s putting pressure on parts of his body and affecting his health, Christensen said. The solution is at the lab, where a suitable chair had recently been donated. He and Cressall go back to pick up the chair, a few tools and some spare parts.

“I don’t know if it’s voodoo in the air or what, but we get a chair in that’s somewhat specialized and in two or three days all of a sudden somebody needs it,” Christensen said with a laugh. “Inevitably it finds a new home within the same time frame. If people knew the value of their donations, it might put more value on donating their stuff they don’t need anymore.”

“Even if we can’t salvage it, we can still take a lot of valuable parts off of it,” Cressall added.

The pair transport the new chair back to the CETC and begin to adapt it for Jason.

“I like how his foot’s fitting in there,” Christensen said as they made another adjustment. “Does that hurt your back, buddy? Does this feel too high?”

“No, not at all,” Jason said. “What are you going to do with my old chair, Clay?”

“I don’t know, there’s not much left of it.”

Still, Christensen and Cressall took the old chair with them to scavenge for parts.

“That was probably a little bit of a miracle there,” Christensen said as they left the CETC and headed back to the lab.

“That’s what it’s all about,” said Cressall.