

# In metals shop, practical approach is best

by SCOTT NEWTON

Building practical projects has been the focus of several Sandy Union High School students this school year.

Projects made for "friends" of the vocational education department include a tilt-bed trailer for a garden tractor, a combination boat-utility trailer and a custom-made bumper.

The tilt-bed trailer was built from scratch, with the students drawing up their own plans. It has stake racks on the side, and a metal bottom that allows material to slide out "very easily" when tilted.

While the "stout, commercial ones" might have a maximum capacity of 200 to 300 pounds, this trailer could carry up to 1,000 pounds, according to Lynn Sondenaa, metals instructor.

Senior Brian Romey oversaw the project, with assistance from junior Todd Kennedy.

The combination boat-utility trailer was rebuilt. Students started out with a frame, tongue and axle. They build a new tongue and axle, and re-enforced

the frame.

The trailer can be used to pull a boat, or else stakes can be put on the side for hauling wood, among other uses.

Senior Paige Chambers was "kind of the foreman," supervising and welding.

Sophomore Shaun Jackson did the electrical wiring. Sophomore Troy Bachmann did the rollers, making the bearings, among other things.

Sophomore Jamie Riggen did most of the work that required a cutting torch.

Sophomore Mark Zimmerman did a lot of the welding. Freshman Clinton Cody did the grinding, cleaning and painting.

Junior Floyd Wheeler assisted Chambers in supervising the project, and did the measuring and other quality control chores.

Senior Chuck Woster was foreman, designer and chief welder on the bumper. Sophomore Jeff Hilliard did some of the welding and most of the grinding.

Sondenaa said work on the projects was handled in a method "similar to in-

dustrial."

The students did cost and strength calculations, cut and assembled new parts, and did vertical, overhead and flat welds.

"If the welds weren't of quality, they ground and redid them," Sondenaa said.

"Most of the kids, when they came in, knew very little about metal working. They've gained quite a few skills in nine weeks."

Sondenaa said skills required included a knowledge of math, engineering, machining, cutting, welding, painting and electrical work.

Sondenaa said he would like to get away from the image of "metals" being a place where some "clutz works with a piece of metal."

Said Sondenaa, "These are highly skilled, intelligent young men. Hopefully by their senior years they will have a good background and a salable skill."

He added, "Kids get bored in a welding booth. This goes back to the philosophy of learning by doing."

The proceeds from the projects will go toward materials or new equipment for the metal shop area.

Sondenaa said he doesn't feel they are competing against businesses in the

area as the most "quality" trailers they could produce in a year would be four, while a business might produce four a week.

Practical projects, he feels, keeps the interest high in the program. He

said they take more pride in a project when they have "a vested interest in it."

Sondenaa said that now instead of students telling a prospective employer that

he can weld, he can describe the projects he's worked on.



Chuck Woster



Brian Romey



Jamie Riggen, Mark Zimmerman and Clinton Cody



Floyd Wheeler and Paige Chambers

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