



KEVIN PREPARING HIS GUITAR FOR FUTURE 'CLASSIC ROCK.'



ZACH BINEGAR AND CODY YEITER

Students may opt to create fret boards for the National Science Foundation's guitar grant and earn \$2 apiece to put toward their own guitar kits of \$130. Manufacturing students in the Southern Wells' program use algebra knowledge through project-based learning and self discovery.



MANUFACTURING: INTRO TO MANUFACTURING / PRE-ENGINEERING  
AVAILABLE @ SOUTHERN WELLS HS

# Making Music in Manufacturing

## Students work under National Science grant

The students think the class is all about making their own guitars.

But it's not.

Southern Wells teacher Doug Hunt is one smart teacher. He is actually "tricking" his students into learning about math and science.

"As soon as you add relevance, you make the math more meaningful," Hunt says.

Hunt is the secondary school contributor on a National Science Foundation grant with representatives from Purdue University and other colleges located in Ohio, Pennsylvania and California. The Southern Wells' students produce all of the fret boards for the guitar project and ship them to Sinclair College (Ohio) where the guitars are assembled. Over 1000 kits will be shipped by the conclusion of 2012.

At Southern Wells, students enrolled in Manufacturing may

create fret boards at \$2 apiece to defray the expense of their own guitar kits that they will design and build throughout the course.

"It gives me confidence to start with a chunk of wood and end up with a playing instrument that looks great," senior Cody Yeiter said.

"I like to see how a project comes together – the painting and assembly. I'm debating on metallic red or black. I'm also in the process of learning to play guitar."

The entire process - from the research conducted to determine what shape and kind of guitar the student wants - to creating the actual instrument, using drill presses, band saws, routers and sanders, is time consuming and tedious.

"We expose the students to math and science, and make it relevant. It is not the goal of the class to teach guitar, but for the

guitar to provide relevance to the classwork," Hunt said.

For the students, who are working hard while having fun, it's also about the guitar colors, styles and getting their work done on time - for the promised guitar lessons soon to follow.

"I'm going to learn to play guitar if I get this right," senior Zach Binegar promised.

"This class is fun."



TREVOR SANDS HIS RED AND WHITE GUITAR

### CLASSES at SOUTHERN WELLS

- Construction Technology Systems
  - Intro to Engineering Design
  - Technology 7
  - Technology 8

### INTRODUCTION COURSE FOR BOTH PATHWAYS: Precision Machining and Pre-Engineering

Course is STEAM: "Science, Technology, Engineering, Art, Math"



Manufacturing teacher Doug Hunt inspects a fret board for warping while classmates students wait with their questions. Hunt was honored with the "Teacher Excellence Award" given by the ITEEA last spring.



CTE Cooperative Serving Adams • Blackford • Huntington • Jay • Wells Counties

1/24/2013

For more information:  
KEVIN KELLER, AREA 18 DIRECTOR  
KKELLER@BHMSD.K12.IN.US