## From gamers to creators

Photos by Keri Wood - Aron Carr, a senior at Sheldon High School, is a part of an after school video game class taught by Shawn Sullivan. Carr and the other students are using math to learn how to create rooms with lighting and props as the base for their new video game.

## *Sheldon High offers video game design class*

**By Cameron Macdonald - Citizen Staff Writer**

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A few years ago, Sheldon High School students joined a small sports league where they competed against other schools via a military-style combat video game.

They are now designing, programming and playing their own video games at school.

One early project was "Tardy Sweep," a game where freshmen students must quickly find their correct classrooms on a three-dimensional replication of the Sheldon High campus.

"Then they go out on campus and they're walking around, (saying), 'Oh my God, I've been here before,'" teacher Shawn Sullivan said.

He is teaching a video game design class that began this school year at Sheldon High.

During an afternoon, his classroom was crowded with students carefully designing rooms in an East Asian palace, complete with lantern lighting and statues.

"I try to get the ancient feel of it," student Aron Carr said.

Sullivan also leads the school's award-winning K9 Studios where students produced documentaries and cartoons.

A few graduates attended prestigious arts colleges like the California Institute of the Arts and one became an artist for the Pixar animation company that produced the movies Toy Story and WALL-E.

During a class, video game design student Andrew Lovato worked on creating a three-dimensional version of the Edwin Deakin painting Hotel de Cluny, 1888 where the viewer

could visually enter the hotel's front entrance. Sacramento's Crocker Art Museum provided the image.

Lovato said that much of his project involves geometry, lighting and textures as well as good knowledge of composition.

"When I was younger, I did not have as much knowledge as I do now in the creation of video games," he said about the class.

Sullivan recalled that the idea for a video game class stemmed from his students' experience in the video game league where they worked in teams and they also discussed video game design.

He said the class is an example of "stealth teaching," saying, "It's taking their passion and showing them how games are made."

Sullivan said the class is working on three-dimensional design where they are creating rooms using the same software used to design the popular Unreal and Gears of War games.

"It's really neat where they are checking each other's work," he said.

The class is also focusing on what exactly makes a fun game where there is the matter of balancing fun and challenge, Sullivan explained.

Students are also assigned to critique and study video games outside class.

Sheldon High graduate Spencer Martin is helping Sullivan teach the video game class. He is currently working to become a teacher.

"I started as a volunteer just because I believed in the program," Martin said.

He explained that video game programming is all about mathematics, adding that a programming major in college is expected to take every math class offered at a high school or junior college.

Martin mentioned that logic plays a major role in design and programming.

"It's how you use the math and the concepts behind the math," he said.

Carr said he first had some trouble learning the concepts of designing. "You have a vision and trying to put it into a program can be a little different," he said.

Carr noted that the class changed his outlook on video games.

"It made me appreciate even mediocre games and the amount of work that goes into them," he said.

Sullivan said that his school is hoping to earn a NASA grant that would support a class project where students design a video game that teaches players about sustaining life on the Moon.