

Lilly Gallagher's Eggception shows promise when it comes to keeping her egg safe from the 20-story free fall.

Physics helps keep eggs safe

By Emily Mentzer

The Itemizer-Observer

INDEPENDENCE — Lilly Gallagher was fairly confident that her contraption would keep her egg from breaking. Her project was an open

cardboard box with support tape wrapped around the center of each edge. In the middle, her egg was suspended with tights - nothing cushioning the cargo. But once the Polk County

Fire District No. 1's ladder truck — 20 stories high was set, Gallagher had a twinge of doubt.

"I'm looking how far that is up, and it just seems impossible," she said.

Gallagher is a senior at Central High School in Greg Craven's physics class. The egg drop is a project to test students' knowledge of

"We had to abide by a lot of different parameters," Gallagher said. "For exam-



EMILY MENTZER/Itemizer-Observer Some eggs survived the giant drop, others didn't.

ple, it couldn't be a solid box because we didn't want to

have a lot of drag." Unlike an egg drop project in eighth grade, the one in high school is not about slowing the egg down,

Craven said.

"The physics we've been studying is being able to manage, you've got some-

thing going and then you want it to stop," he said. "How do you make that happen without destroying the thing."

Students built their contraptions with the idea of a fast fall, followed by a slow stop, Craven said.

"They want to manage it so that, after the impact starts, the slowing down

happens over a long period of time, because that's the small force that doesn't break the egg.'

The egg itself could be wrapped in a container no larger than a liter, and surrounded with a cushion such as foam or padding. Because of the spectacular mess it makes, peanut butter and Jello were off this year's list of approved padding, Craven said.

The project caps the class' study on momentum, he added.

"It's fun because I want my kids to learn in different ways, and this is different than sitting there and taking in information or discussion or reading," Craven said. "This is a chance for them to problem solve, and I think that really is a life skill, which is why I do this.

Gallagher said she hoped the outer part of her contraption would act as crumple zones found on cars.

See EGG, Page 6A

Dallas high could add new programs

By Jolene Guzman

The Itemizer-Observer

DALLAS — Of people who do not finish high school, 80 percent say that they didn't see how the skills they were learning in school would help them after graduation.

Tim Ray, Dallas School District's career and technical education coordinator, presented that statistic at a joint meeting between the Dallas City Council and Dallas School Board on March 13.

They didn't connect with what they were being taught in school," he said. "They didn't see how it was going to relate to them after they left."

He thinks successful CTE programs can be a remedy to

"High school students involved in CTE are more engaged, perform better and graduate at higher rates," Ray

He said nationwide, students in CTE programs graduated at 93 percent. Their counterparts not participating in a program graduated at 80 percent. In Oregon, the difference is bigger, 91 percent for CTE students compared to 75 percent who were not.

Dallas High School has only two accredited programs — meaning they offer enough classes for two credits — agricultural science, and technology and engineering. Within those two areas, the graduation rate is 94 per-"That is my challenge to myself: To increase those op-

portunities for students to find their passion or — just as importantly - figure out what they don't want to do," Ray A former agricultural teacher in Dallas, Ray has re-

turned to lead the district's effort to develop CTE pro-Ray said Dallas could easily develop up to four more

areas of study in addition to its accredited agricultural science, and technology and engineering programs. The district is halfway to developing an information and communication technology program.

He said the school could add education, health science, and culinary arts.

"That's the low-hanging fruit that I think we can get to fairly easily," Ray said. "The classes are there, we have teachers teaching them. It's a matter of organizing them and getting some context around them."

Other options, though they would require more planning, are business and manufacturing.

Ray said modern CTE programs are not the vocational courses of yesteryear. They are open to all students and offer options for jobs out of high school or continuing ed-

For that reason, the programs at high schools need to meet standards of those offered at community colleges.

Making sure programs teach skills needed by local industry is key, Ray said. The district will ask business owners and professionals to work on committees designing the programs.

"I believe this will work. I can't do it by myself. This has to be a community effort," Ray said.

"If we start producing skilled workers, guess what will come? I believe skilled jobs will come. Skilled jobs pay





2 Years or 24K Miles **Complimentary Service!**

FULL VEHICLE SERVICE & MAINTENANCE

ATTERY REPLACEMENT

Knowledgeable Service Advisors to assist you.

🎤 Full service car repair and maintenance by Certified Technicians.



2004 CHEVROLET SUBURBAN V8 • 4X4

2000 HONDA

CIVIC LX

TK#s712276a



2006 DODGE

RAM 2500 SLT



2007 JEEP

WRANGLER SAHARA **4X4 • EXCELLENT CONDITION!**

BATTERY REPLACEME Valid at Capitol West Valley location only. Max discount \$75. Must present at time of write up, no cash value, does not apply to prior service, cannot be combined with other coupons. Exp. 3/31/17. LUBE OIL & FILTER

REGULAR OR SYNTHETIC

Includes a Free Multi-Point Inspection!

Must present coupon at time of service. Valid at Capitol West Valley location only. Expires 3/31/17.



2015 FORD

FUSION SE

2.5L 4CYL • MP3 **BACK UP CAM**

2014 MAZDA

MAZDA3 I SPORT 2.0L 4CYL • MP3 • BLUETOOTH

* Subject to prior sale. Prices do not include license fees, title fees and \$100 Doc fees. All financing on approved credit, with Tier 3 and above credit rating. All sale prices on in stock units only. Expires 3/31.

(503) 623-6686 Service: (888) 480-2074 812 SE. Jefferson St. Dallas

Hours: Mon. - Sat. 9am. to 6pm. Service Mon. - Fri. 7:30 - 5:30

SEE OUR ENTIRE INVENTORY ONLINE! cap-westvalley.com