As part of its services to 16 school districts in Lane County, the Lane Education Services District has created SparkLab, a facility designed to bridge the gap between underserved students and STEM (Science, Technology, Engineering and Mathematics) education. Jason Thibodeau, the Connected Lane County Project Coordinator gave Springfield City Club an overview of the program on August 8.

SparkLab is not a replacement for district programs providing STEM education, nor is it something that suggests that the districts are not doing a good job in providing that education, Thibodeau said. Rather, he said, it is designed to involve students who have historically been not exposed to science and technology, or have been steered away from it, and give them a chance to explore the options that sort of education can offer. It is also not necessarily focused on interesting students in academic pursuits, but on Career Technical Education (CTE).



Thibodeau focused on one particular program that SparkLab offered recently – a five-week invention camp, to demonstrate how the program involves education and industry partners to help youth 14-22 learn what opportunities they might want to explore during the regular school year. Students spent a five week course in the new SparkLab facility in hands on work that resulted in inventions with real world impact. In particular he described a $CO_2$ monitor designed and created by the students, who work as paid interns, that can be put into practical application in buildings and offices today.

The students used the equipment in the lab – including a collaborative robot, several 3D printers (some of which the students built themselves) and other small machines to take a concept from design to construction. It is important that the students be paid as interns, because otherwise they would need, in most cases, to find summer jobs to help support themselves and their families. The idea, he said, to offer real world work experience and not force students to choose between work and learning.

Overall, SparkLab hopes to serve about 300 students during a year and hopes to serve more if it can find resources to open remote facilities. They are looking to find a site for a facility in Springfield and hope, in time, in cities like Florence, Cottage Grove, and Oak Ridge. They would like to find a location near some sort of transit service of about 3,000 to 4,000 square feet in each city. When asked to estimate the cost of creating a remote facility, Mr. Thibodeau was cautious, noting that in establishing the Eugene facility at 22 W. Seventh Avenue, they had come up against the unexpected surprise of having to create sperate sets of bathrooms for the interns and for staff – which turned out to be the major cost item.

Other ongoing expenses of the program include one or two staff at each location, transportation for students (including in some cases gas cards for those who live distant from the lab), and meals. Right now, breakfast is provided by 4J and lunches provided by catering funded by industry partners.

More information on the program can be found at the Connected Lane County web site.