

## Integrating STEAM with Problem-Based Learning at West Jefferson Middle School

West Jeff Middle is continuing to implement STEAM (through PBL) in the 2017-2018 school year. This year, our focus is on increasing student inquiry and building student skills in the Jeffco 2020 competencies.

### Why STEAM and PBL?

- Rigor and content levels will increase through application of content standards.
- Focus on the application of students' learning to local and global issues.
- Their ability to work successfully in this collaborative problem-solving environment develops skills to be competitive in the 21st century workforce.

### Is this a change in curriculum?

The content covered in classes will remain aligned with district and state standards; the approach to the content will change.

Students will continue to have 4 core classes and 2 elective classes.

*STEAM* is an acronym for Science, Technology, Engineering, Arts, and Mathematics. Components of all these areas are integrated across classrooms and content areas in a STEAM-focused classroom.

*PBL* is an acronym for Problem-Based Learning, which is one way students learn in a STEAM based classroom. In PBL, students explore **authentic, engaging, or complex problems**. They will learn through **inquiry** by asking questions, finding resources, and applying information. Students **focus on the Jeffco 2020 competencies:** collaboration, communication, creativity, critical thinking, and civic/global engagement,, self-direction and personal responsibility, and content mastery. To demonstrate their learning, students present a **public product** – one shared with an audience wider than a single teacher, not necessarily the general public.

