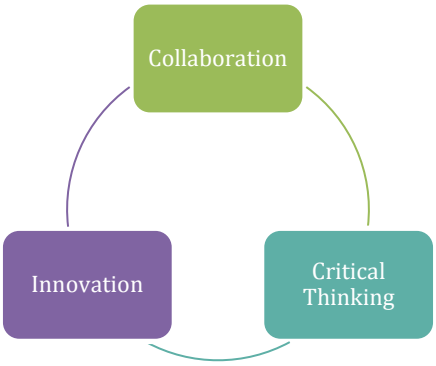
STEM School Chattanooga
11th Grade PBL
Unit Plan Template

Unit Quarter: 2nd

Title: FabLab Workshop for Middle School Girls



Learning Target Topics

Collaboration: Working with other people on a project or problem to achieve a shared goal.

Critical Thinking: Accessing, using, and applying information and knowledge.

Innovation: Using creative thinking to construct something new and valuable.

Grade Level	11th Grade	Unit Length	9 Weeks
Industry Partner	• Phyllis Klein, Director, FabLab DC		
Unit Overview	STEM student teams will design, develop, test, and present a 5-day FabLab workshop for middle school youth. For FabLab DC, the focus is on creating a workshop to teach and inspire middle-school girls to apply human-centered design principles and create solutions to real problems. For the STEM School, the focus is on the student teams demonstrating critical thinking skills throughout product development.		
Unit Essential Issue	• **Project**: *Design and build a FabLab workshop for middle school girls.*		
Kick Off Event	**Kick Off: TBD** Via a Skype video conference call, FabLab DC will provide an overview of their lab, its purpose, and capabilities. They will explain their vision for creating a workshop to engage middle school girls for a summer 2016 program. The kickoff will address project requirements, desired outcomes, unique and essential aspects of the curriculum, and limitations.		
Culminating Events	**Presentation Day: TBD** Via a Skype video conference call, the student teams will present their curriculum, discuss how they applied design-thinking principles, and show videos and examples of the curriculum and samples of projects designed for middle school girls. The student teams will receive feedback from the project at the conclusion of the presentations.		
Common Assessment	Students will be scored using the Association of American Colleges and Universities rubric for Critical Thinking Skills. All 4's will equate to Advanced, scores of 3 and 4 will equate to Proficient, and any scores below a 3 will equate to Below Basic. Items that will be used to score student work: • Assignments (Plans, Weekly Status Reports, Design Process Work Products, etc.) • Presentation • Product (FabLab DC curriculum for middle school girls)		