

STEM School Chattanooga

12th Grade PBL

Unit Plan Template

Senior Capstone Project: SURGE Pitch Competition



Learning Target Topics: Stem Tenants

Collaboration: *Networking*, Network with experts/ professionals

Critical Thinking: *Expert Knowledge*, Accessing, using, and applying information and knowledge. Applying expert and professional knowledge in solution development.

Innovation: *Invent*, Using creative thinking to construct something new and valuable. Define problem, develop solution and invent new product

Grade Level	12 th Grade	Unit Length	20 Weeks
Industry Partner	Allison Reedy – Co.Lab Chattanooga, Allison@colab.com Gina Soltau – Launch Chattanooga, gsoltau@launchchattanooga.org Brij Singh, SCORE, bbpsingh@yahoo.com		
Unit Overview	Students will participate in Surge pitch competition in January 2017, where they will pitch their ideas for starting a business around a product or service. Through applying the scientific method to starting a business, they will build a canvas, a simplified business plan, where they will identify problems and form solutions in the form of a hypothesis. Through early customer centric testing, creation of feedback loops, and reiteration, students will refine their ideas into a high quality product or service, and build a formal business plan that is presented in the culminating event.		
Unit Essential Issue	Design and pitch a startup business that solves a problem with a marketable product or service.		
Kick Off Event	Mike Bradshaw of Company Labs (Co.Labs) Chattanooga will share his entrepreneurial experience. During this event, Mike will discuss the business canvas, and how it is used to create a customer focused solution.		
Culminating Events	The STEM School and Co.Lab will host the annual Surge pitch competition at Chattanooga State campus. Students will pitch to judges. Top teams will pitch to venture capitalists in Chattanooga.		
Common Assessment	Throughout the PBL, students will be tasked with the following deliverables:		
	Semester 1 9/9/16	Team Contracts	Contract Rubric
	9/16/16	1st Prototype	Prototype Rubric
	9/16/16	Storyboard	Storyboard Rubric
	9/28/16-9/29/16 9:00-10:30 AM	Canvas - Gallery Walk (Teachers)	Canvas Rubric
	10/27/16	Canvas - Gallery Walk (Community)	Canvas Rubric
	11/3/16	Final Prototype	Prototype Rubric

	11/10/16	1st Practice Pitch: Donen, David, Otero, Stanley, Wilson	Surge Judges Rubric
	11/17/16	2nd Practice Pitch: Community/Parents	Surge Judges Rubric
	12/8/16	Video of presentation	Surge Judges Rubric
	1/6/17 (Chatt State)	3rd Practice Pitch: Co.Lab, Launch judges prep	Surge Judges Rubric
	DATE: January 12, 2017	Presentation: Surge High School	Surge Judges Rubric

Contracts Rubric Overview

A contract is a formal written document that outlines the procedures for collaboration and expectations for teamwork.

Advanced (4)

1. Include a contract section titled "Key Performance Skill Areas". Refer to the 21st Century Workplace Skills self-assessment. As a team, determine the top two skills from each of the five categories you believe are important for success. In a table, list these ten skills in a column. In another column, list the team member(s) who possess this skill. Then discuss how your team's organization takes advantage of your team members' skills. If your team is weak in a particular skill area, include a plan to address this weak area through training or seeking assistance.

Proficient (3)

1. Include a contract section titled "Making Decisions". Discuss how your team will make decisions.
2. Include a contract section titled "Roles and Responsibilities". Discuss who is going to do what on your team.
3. Include a contract section titled "Deadlines". Discuss how your team will make sure it meets PBL deadlines.
4. Include a contract section titled "Interventions". Discuss what interventions your team will use to address performance issues with team member.
5. Include a contract section titled "Termination". Discuss the process for firing a team member.





Minimum Requirement Components

1. All team member names present
2. Proper grammar and conventions followed
3. Neat and logically organized/designed using numbered headings. For example:
 1. Roles and Responsibilities
 - a. {add your text...}
 - b. {add your text...}
 2. Decision Making
 - a. {add your text...}
 - b. {add your text...}

Prototype Rubric

- + Advanced
- ✓ Proficient
- △ Basic
- ⊘ Below Basic





prototype

	In addition to ✓ prototypes are tested in a thorough, engaging manner.
	Prototyping provides a solution for user needs including a record of the iterations moving from low to high resolution of the prototype describing what was learned from each user test.
	Prototyping provides partial solution for a user's needs. Little or no iteration.
	Little or no prototyping accomplished.

Storyboard Rubric

- + Advanced
- ✓ Proficient
- △ Basic
- ⊘ Below Basic

storytelling

	Team tells a captivating/engaging story that ties together the prototyping, P.O.V., and empathy expressed for a user.
	Team can link prototyping, P.O.V., and empathy expressed for a user.
	Team can describe their solution with some connection to P.O.V. and/or empathy.
	Team is unable to tell a story about their solution.

Canvas Poster

SURGE Canvas Poster Rubric

	Advanced	Proficient
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Introduction on Company Name, Problem	<ol style="list-style-type: none"> 1. Introduction successfully establishes the context (concept) of the company. 2. Problem statement demonstrates depth of knowledge of potential customers. 3. Company name is relevant, appropriate, and highly creative. 	<ol style="list-style-type: none"> 1. Includes question or problem to be answered by solution. 2. Presents the purpose and objectives of the company. 3. Company name is relevant and appropriate. 4. States "How Might We..." in the problem statement. 2 of 3 of the "advanced" conditions is met
Customer-Centric Solution	<ol style="list-style-type: none"> 1. Clear understanding of customer needs/wants through statistical, empirically validated evidence. 2. The description gives specific correlations between solution and problem. 	<ol style="list-style-type: none"> 1. Understanding of customer based on anecdotal evidence. 2. The description gives generalities, enough for reader to understand how the solution meets the needs of customers.

		3. Solution summarized in paragraph form.
Marketing	<p>1. Results and data are clearly recorded, organized, analyzed to formulate a clearly defined marketing strategy.</p> <p>2. Marketing solution comprehensively addresses customer groups and creates a specific plan for each.</p>	<p>1. Contains a step-by-step marketing plan.</p> <p>2. Marketing solutions are appropriate and plan provides 1-2 specific details for each step.</p>
Money	<p>1. Contains graphic representations of cash flow during first year.</p> <p>2. Break-even point clearly identified with graphic representations.</p> <p>3. Detailed budget projected two years beyond first year (total of three years) with graphic modeling.</p>	<p>1. Contains a budget spreadsheet for the first year of operation.</p> <p>2. Answers these questions: What is your start-up cost? What is your variable cost? What is your fixed cost? What is your typical sale and unit price? What is your break-even point? □</p>

Distribution	<ol style="list-style-type: none"> 1. Provides analysis for possible distribution disruptions and solutions. 2. Analysis of other methods of delivery for similar product or service. 	<ol style="list-style-type: none"> 1. Has detailed description of how product or service is delivered to the customer. 2. Identifies all components of the supply chain.
Oral Presentation A brief (3-4 minute), clear presentation accompanies the poster to explain and elaborate on information presented.	<ol style="list-style-type: none"> 1. Accurately answers questions. 2. Articulates a depth of knowledge by providing evidence in the form of examples, illustrations, facts, and relevant information. 	<ol style="list-style-type: none"> 1. Clearly and audibly describes key components of Canvas. 2. Demonstrates basic knowledge but is unable to provide examples or show any depth of knowledge.

Surge Judges Rubric

TBA September 2016