



iSchool High STEM Academy Senior Capstone Project

T-STEM
SUMMER LEADERSHIP
CONVENING


JUNE 17 -18, 2015

Communities Foundation of Texas
5500 Caruth Haven Lane
Dallas, Texas 75225


Johannes Starks
Campus Manager
Email: Jbrooks-starks@responsiveed.com
Phone: 972-317-2470



iSchool High
STEM Academy
Senior Capstone
Project



- Who are we?
- Why Senior Capstone?
- What is Senior Capstone?
- Whats Next?





18 x 217 x 42 x 13
Public Charter
"i" is for Innovation




Innovation
New method, idea or product

All individuals innovate, and all types of innovators are necessary to successfully sustain innovation.






REVOLUTIONARY IDEAS
Redefine problems, break boundaries, and create new paradigms. They provide completely new and sometimes disruptive ideas. The first flight and the personal computer are examples of revolutionary ideas. Steve Jobs and Thomas Kuhn are good examples of Revolutionary Innovators.

EXPANSIONARY IDEAS
Challenge the current problem definitions. They answer the question: "How can we do things differently?" An example is a product line extension, such as Apple introducing its iPhone which uses much of the same technology as other smartphones combined with previous iPod products. The iPhone pulled in new customers and expanded the market. As an Expansionary Innovator, Tom Peters would tell you to continue doing what you are good at.



EVOLUTIONARY IDEAS
Seek solutions by using existing concepts. They question: "How can we do things better?" These ideas can be very process-driven, such as Lean Six Sigma, which uses the "Define, Measure, Analyze, Improve, and Control" (or DMAIC) methodology. William Edward Deming, the father of the quality movement, is an excellent example of an Evolutionary Innovator.

Product Design/Customers
Operational/Innovation/Performance

How to make Innovation Happen

- What does innovation mean to your organization?
- What quantifiable gains are measured and recognized?
- Where do your innovation goals fall on the Innovation Continuum?
- Who in your organization prefers working on Revolutionary projects? Expansionary projects? Evolutionary project?



What is capstone?

- Advanced Engineering Presentation and Design
- CTE course
- Required Senior class
- Two teachers





How does Capstone Work?

- Junior Year Innovation Strengths Preference Indicator® (ISPI®)
- Teams formed by Capstone teachers
- Project Planning
- Time Management
- Elevator Pitches





Expectations

- Define a product or idea
- Set up biweekly project check in
- Find a mentor
- Project presentation every 3 weeks
- Maintain a budget



After Action Review Process



What was our Goal?	What did we do?
What went well?	What didn't go well?



Project Overview

TEAM MEMBERS: SENIOR CAPSTONE PROJECT PROJECT OVERVIEW 2014-2015

[Select Date]

OVERVIEW

1. Project Background and Description

i [Describe how this project came about, who is involved, and the purpose.]

Note: To delete any tip (such as this) just click it and start typing. If you're not yet ready to add your own text, just click a tip and press spacebar to remove it.

2. Project Scope

i [Project scope defines the boundaries of a project. Think of the scope as an imaginary box that will enclose all the project elements/activities. It not only defines what you are doing (what goes into the box), but it sets limits for what will not be done as part of the project (what doesn't fit in the box). Scope answers questions including what will be done, what won't be done, and what the result will look like.]

3. High-Level Requirements

i [Describe the high level requirements for the project. For example:]

The new system must include the following:

- Ability to allow both internal and external users to access the application without downloading any software
- Ability to interface with the existing data warehouse application
- Ability to incorporate automated routing and notifications based on business rules

4. Deliverables

i [List agencies, stakeholders or divisions which will be impacted by this project and describe how they will be affected by the project.]

5. Affected Parties

i [List business processes or systems which will be impacted by this project and describe how they will be affected.]

6. Affected Business Processes or Systems

i [Describe any specific components that are excluded from this project.]

7. Specific Exclusions from Scope

i [Describe how you plan to implement the project. For example, will all parts of the project be rolled out at once or will it be incremental? What will be included in each release?]

8. Implementation Plan

i [Include recommendations that lead to your proposed solution. Summarize what you're proposing to do and how you're going to meet the goals. You'll be able to expand on the details within the 'Our Proposal' section.]

9. High-Level Timeline/Schedule

i [Describe what the high level timeline/schedule will be to plan, design, develop and deploy the project. Generally, by when do you expect this project to be finished?]

APPROVAL AND AUTHORITY TO PROCEED

We approve the project as described above, and authorize the team to proceed.

Name	Title	Date

Approved By _____ Date _____

Approved By _____ Date _____



Status Report

iSchool High STEM Senior Capstone Project Status 2014-2015



CAPSTONE STATUS REPORT

Team Member Information:

Team Members: _____ Team Leader: _____

Project Name: _____ Mentor: _____

Report start date [Start date] _____ Report end date [End date] _____

Short-term action items

Action item	Due date	Status
	[Due date]	
	[Due date]	
	[Due date]	
	[Due date]	
	[Due date]	
	[Due date]	

Long-term goals

Goals	Due date	Progress
	[Due date]	
	[Due date]	
	[Due date]	
	[Due date]	
	[Due date]	
	[Due date]	

Accomplishments

Concerns