

# Project Lets Talk Code

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School of Informatics, Computing, and Cyber Systems

# Project Framework

## Guiding Co-STEM and LTC

### Teachers

Professional  
Development & Support



### Students

Engage with  
community/culture  
relevant STEM learning



### Community

Guide and support  
community-relevant  
projects

**Collaboratively develop teacher professional development curriculum and student curriculum that support meaningful engagement in STEM**

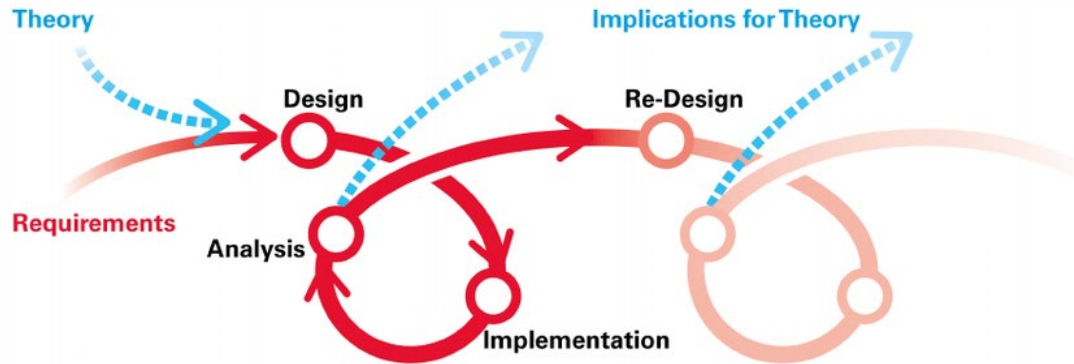
**Co-STEM:** Project-Based Learning experience using community-relevant data  
**LTC:** Coding experience developing apps with community/cultural connections

**Address a disparity in STEM access and opportunity and fill a need for community/culturally connected learning**

# Design Based Research Approach

## *Guiding Co-STEM & LTC*

Iterative rounds of development and re-design, using feedback from teachers, community advisors, instructors and project partners.



Design-based research as an ongoing process of innovation. Figure adapted from Fraefel (2014, p. 9)

**Cycles of Design & Revision**  
*Teacher Professional Development  
& Classroom Implementation*  
*LTC & Co-STEM*

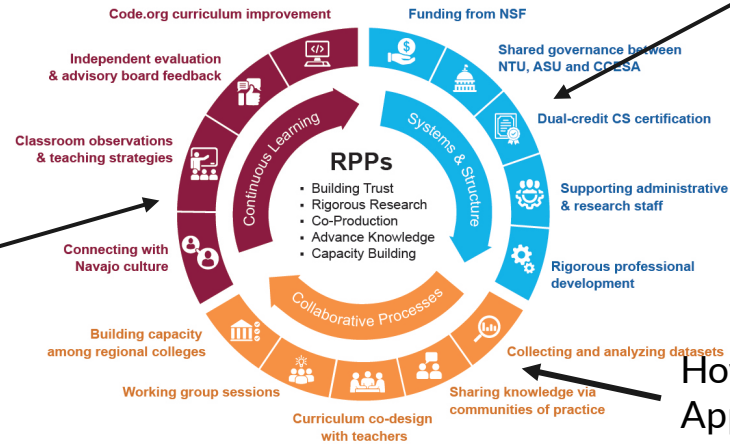
**Year 1 (Pilot Year)** Develop professional development course materials, identify community topics/issues of relevance to provide anchoring context for learning, test strategies for online/hybrid learning, engage with supportive curriculum (eg. code.org) and identifying needs among participating schools and teachers.

**Year 2 (1st Revision)** Re-implement the pieces and strategies of the training sessions with identified relevance and impact, expand network of community partners and corresponding feedback cycles, shift course focus towards classroom implementation support and follow-up.

# Questions Guiding Iterative Process of Curriculum Design

## Project LTC

### RPP Framework



How can students engage in CS practices to learn the content of their disciplines?

How can community and culture provide an anchor and context for student learning?

How can students build meaningful Apps that can help them connect with their communities

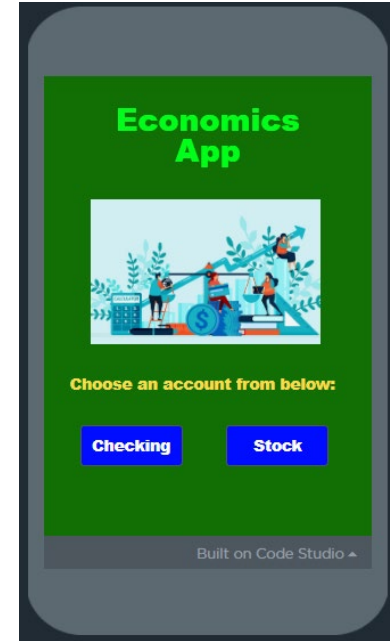
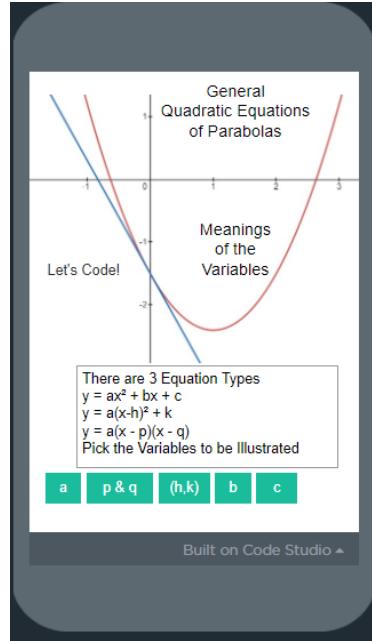
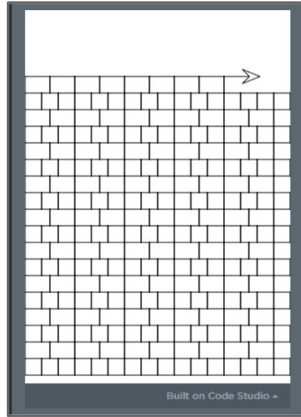
# How can community and culture provide an anchor and context for student learning?



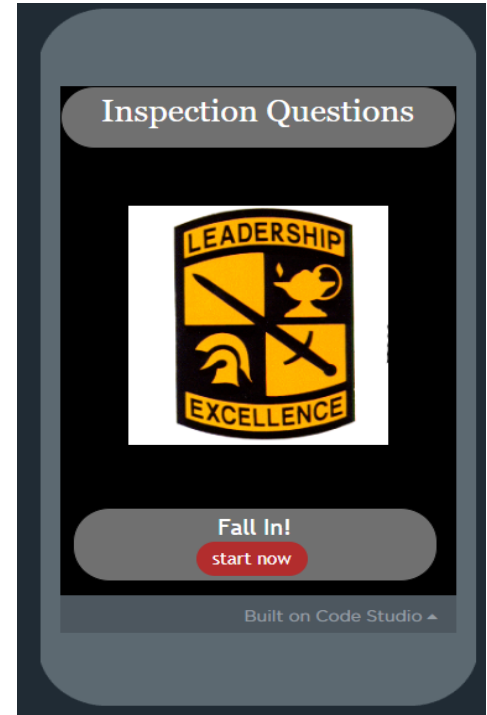
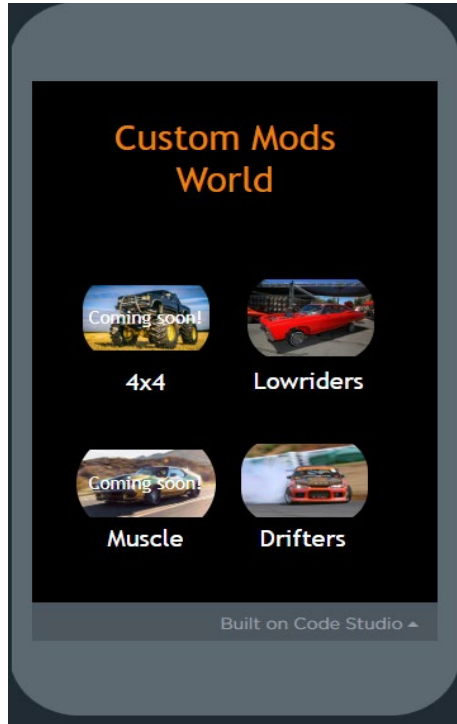
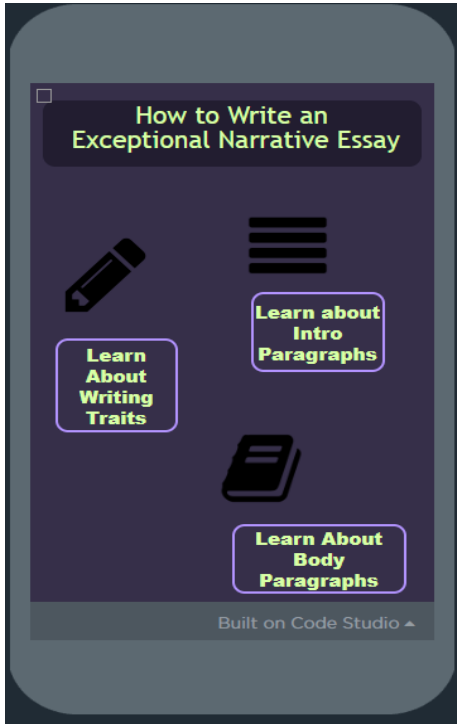
# How can students engage in CS practices to learn the content of their disciplines?

Student Artwork - Made with Code

<http://bit.ly/geocode-aatm>



# How can students build meaningful Apps that can help them connect with their communities





# How can students build meaningful Apps that can help them connect with their communities



# Early Insights from Code.org Platform

## Project Lets Talk Code Spring 2022

Assigned to: Computer Science Principles ('21-'22)

[Progress](#)
[Text Responses](#)
[Assessments/Surveys](#)
[Projects](#)

Select a course or unit  
Intro to App Design ('21-'22)

View By  
[Lessons](#)
[Levels](#)

Lessons attempted in Intro to App Design ('21-'22)

Lesson	1	2	3	4	5	6	7	8	9	10	🔒
▶ adinogmcs	■	■	-	■	■	■	■	■	■	■	□
▶ ARNEL DELA C...	■	■	-	□	□	■	■	■	□	□	□
▶ Catherine Begay	■	■	-	■	■	■	■	■	■	■	□
▶ Duree Lomadafk...	■	■	-	■	■	■	■	■	□	□	□
▶ Joel Medina	□	□	-	□	□	□	□	□	□	□	□
▶ Jordan Mallari	■	■	-	■	■	■	■	■	■	■	□
▶ Josue Sonido	■	■	-	■	■	■	■	■	■	■	□
▶ Judith Flojo	■	■	-	■	■	■	■	■	■	□	□
▶ Peter Romine	□	□	-	□	□	□	□	□	□	□	□
▶ Robert Woodruff	■	■	-	■	■	■	■	■	□	□	□
▶ Ronalyn Manores	■	■	-	■	■	■	■	■	■	■	□
▶ Sharon Balcos	□	□	-	□	□	□	□	□	□	□	□
▶ Student Student	□	□	-	□	□	□	□	□	□	□	□
▶ Terrill Nickerson	■	■	-	■	■	■	■	■	■	■	□

## Project Lets Talk Code Summer 2022

Assigned to: Computer Science Principles ('22-'23)

[Progress](#)
[Text Responses](#)
[Assessments/Surveys](#)
[Projects](#)

Select a course or unit  
Intro to App Design ('22-'23)

View By  
[Lessons](#)
[Levels](#)

Lessons attempted in Intro to App Design ('22-'23)

Lesson	1	2	3	4	5	6	7	8	9	10	🔒
▶ Amanda Allen	■	■	-	■	■	■	■	■	□	□	□
▶ Arvis Myron	■	■	-	□	□	■	■	■	□	□	□
▶ Bryan Larson	■	■	-	■	■	■	■	■	□	□	□
▶ Greg Case	■	■	-	■	■	■	■	■	■	□	□
▶ Michael Jones	■	■	-	■	■	■	■	■	■	□	□
▶ Nathan Wilson	■	■	-	■	■	■	■	■	□	□	□
▶ Robert Berkey	■	■	-	□	■	■	■	■	□	□	□
▶ Traci Jones	□	■	-	■	■	■	■	■	■	■	□

# ACKNOWLEDGEMENTS

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Americans by Blending Code with Nature, Art and Culture”



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