

bit.ly/microbitX

micro:bit + X



A diagram consisting of a dashed white rectangle at the top and a solid white rectangle at the bottom. A dashed curved arrow points from the top-right corner of the dashed rectangle to the top-right corner of the solid rectangle. A solid vertical double-headed arrow connects the right side of the dashed rectangle to the right side of the solid rectangle.

Dr. Abigail Joseph

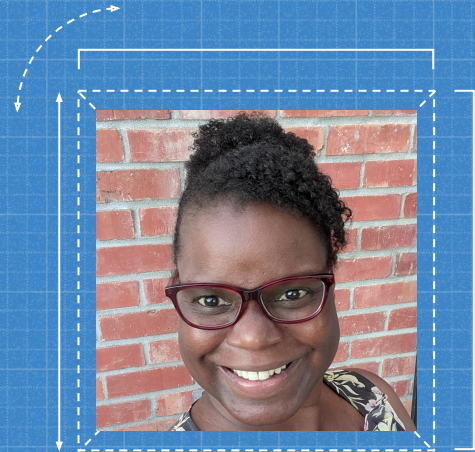
**Director of Learning,
Innovation, and Design**

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San Jose, CA

The Innovation Doctor

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If you really knew me...



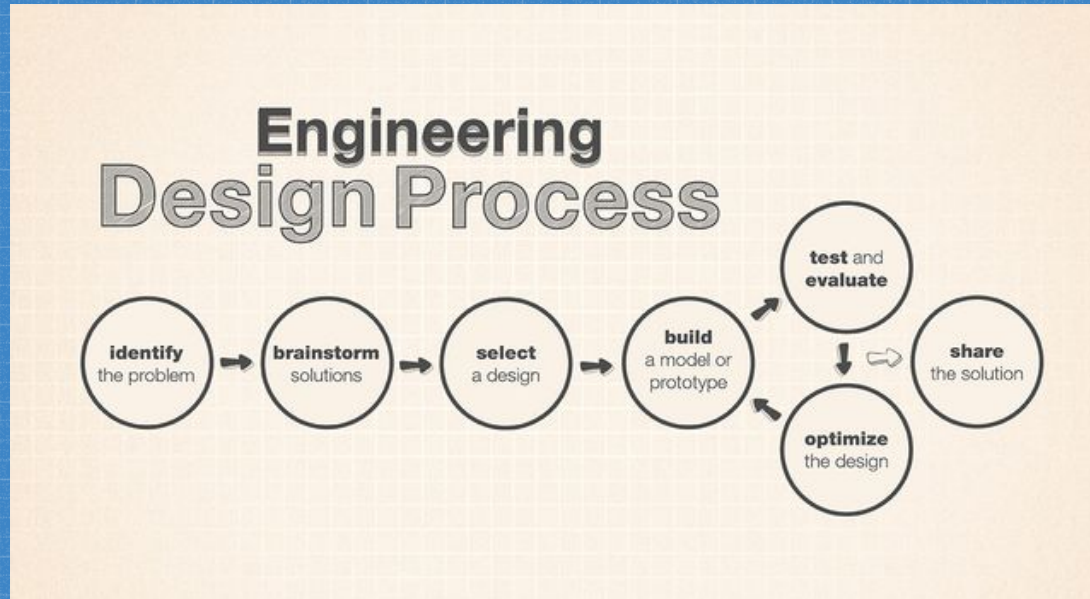
What do you SEE, THINK, and WONDER?



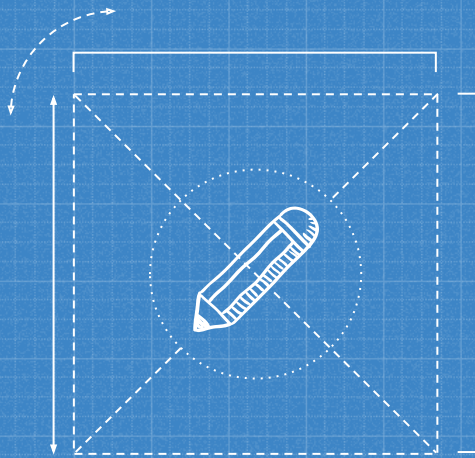
How is CS changing the world?



I see a world of problems waiting to be solved...



... and questions to be asked



MICRO:BIT + X DESIGN PROBLEMS

What questions can we ask that would open a world of
imagination and creativity?

How might we build **A BETTER BOOK?**

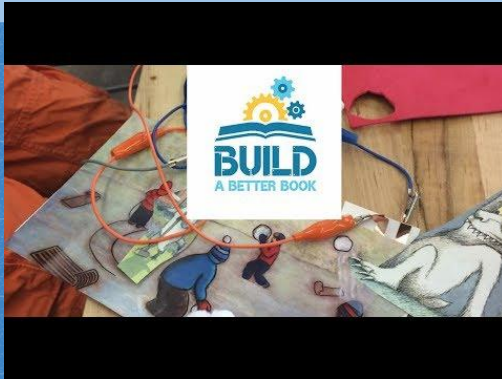


How might we make **STORIES COME TO LIFE?**



Spark with discussion

Why do we tell stories?
How do we share stories?
What makes stories fun?



Identify a problem with
a question

How might we enhance a story
book?



Criteria, Constraints
and Prototype

2 Class Periods
Two interactions
At least one page

University of Colorado - Boulder
Build A Better Book

How might we improve **TRAVEL EXPERIENCES?**



How might we improve **TRAVEL EXPERIENCES?**



Spark with discussion

What is travel?
How do we travel?
What's fun about travel?
What's challenging?



Identify a problem with
a question

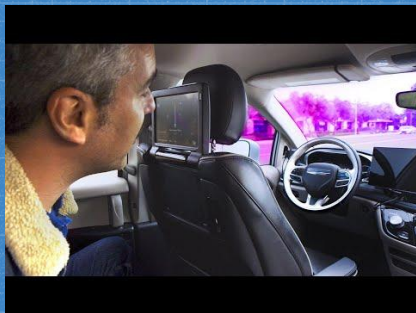
How might we make a tool to
remind someone to journal about
a trip?
How might we inform people
when we are in danger?



Criteria, Constraints
and Prototype



Google Translate



Self-Driving Cars

How might we **LIGHT UP THE WORLD?**



How might we **LIGHT UP THE WORLD?**



Spark with discussion



Identify a problem with
a question

Where do we see light?
What do we use light for?



Miral Kotb - iLuminate

@drabigailjoseph 2021

How might we incorporate more
lights into our life?



Criteria, Constraints
and Prototype

How might we **HELP OUR COMMUNITY?**



How might we **HELP OUR COMMUNITY?**

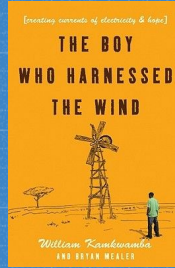


Spark with discussion



Identify a problem with a question

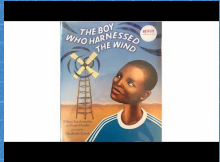
What is community?
Who makes up your community?
What problems does your community face?



How might we incorporate more lights into our life?

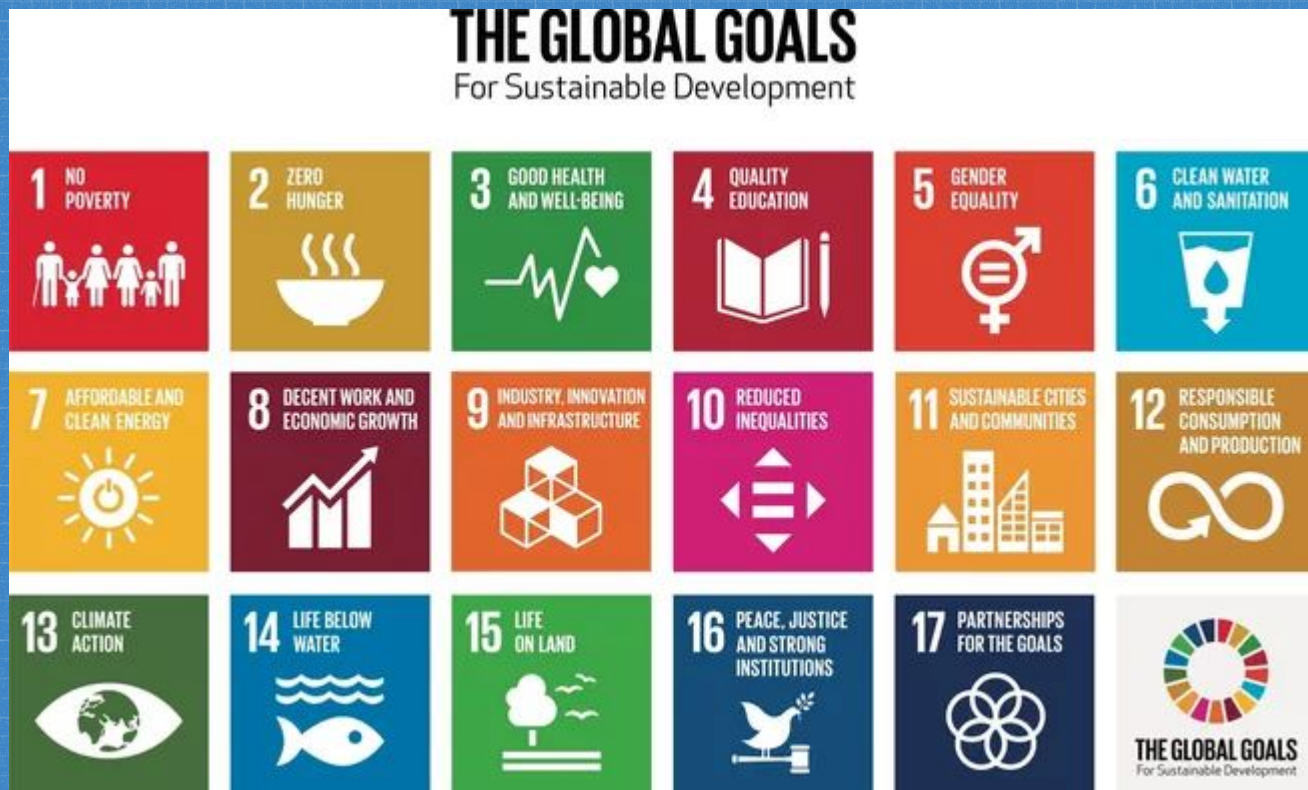


Criteria, Constraints
and Prototype



The Boy Who Harnessed the Wind
William Kamkwamba

DO YOUR BIT...



Do Your Bit

The Global Goals

micro:bit
Introducing the
Global Goals

CREDITS

Special thanks to all the people who made and released these awesome resources for free:

- Presentation template by [SlidesCarnival](#)
- Photographs by [Unsplash](#)