# Share Observations and Ideas about Teaching STEM in COVID Times Using Innovators' Compass Online

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@valeriateaches

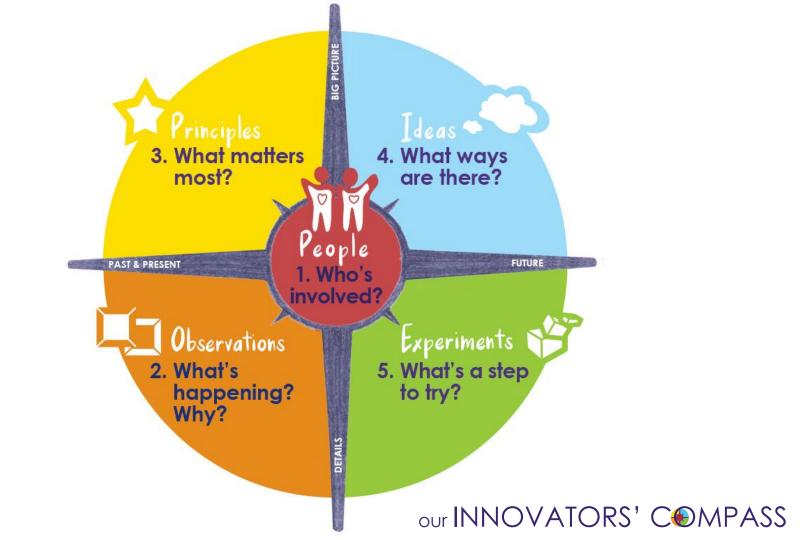


# Challenges we're facing

- Teaching STEM (semi)-remotely
- SEL & staff/parent collaboration to make that successful

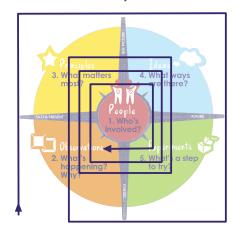
# A STEM-inspired tool

An MIT & IDEO alumna found that 5 questions drive many practices from STEM to SEL, and wondered "What if we made it easy to ask these more?"

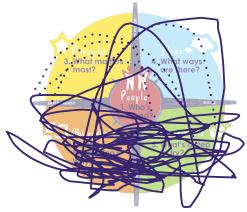


### Scientific Method, Design Thinking, Restorative Justice, and A LOT more...

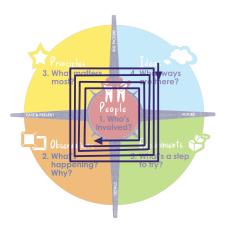
The numbered way:



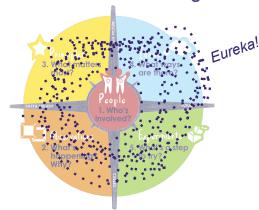
**Tinkering & Improvising** 



Lean/Agile software development methods



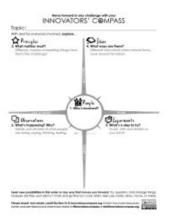
Subconscious & "Sudden genius"



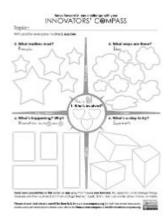
### innovatorscompass.org/downloads

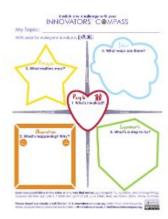




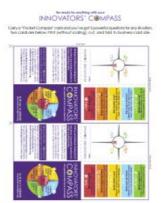


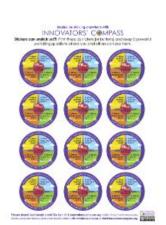






#### Prompts & Games







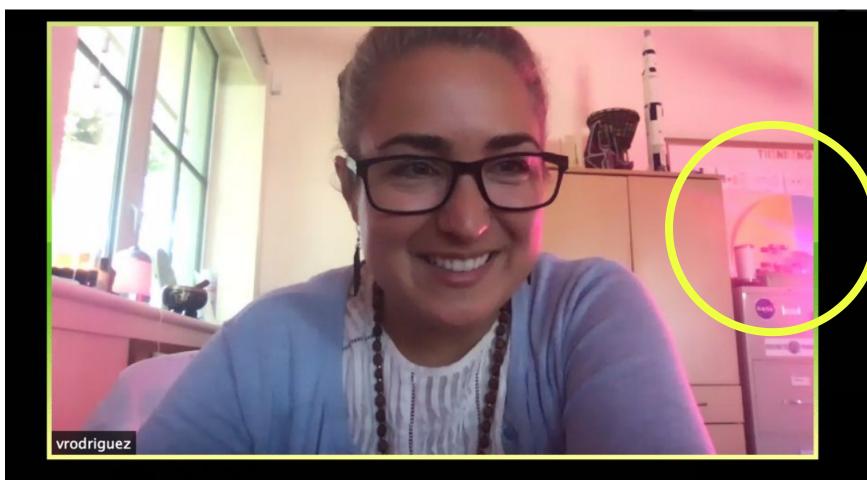




icompass.me The Innovators' Compass 公 0 4 https://icompass.me/compass/edit/63c4e3f4/Ela Q 0 BIG PICTURE TOPIC: SXSWedu UNSTICK! Workshop Focus on BREAKTHROUGHS. Have everyone join a google classroom? Engaging early and throughout UNSTICKING Have a timewatcher offer up the app as an alternative for tables who want to try \* people may not have Bring food? computers 2nd set of slides at end \* people may not have so we have option to use the app Watch Time the app for debrief Compare principles Use Valeria's wordle app K.I.S.S. Elannoiding SCHOOL LEVEL 4. What ways are there? digital sign-in to make group email easier (google form) Group them by common stucks? Email each table after 1 week to follow up table #s | or THEY name their WEAR COMPASS T-SHIRTS under buttondown shirts or cardigans that we can open up ?! Educators PRESENT (T's, A's), others? Us FUTURE Valeria Set up Action Plans: LUNCHTIME: people Some possibly returning! hungry... 2 hours flies by. It can Ela will pull together all feel frantic if we rush. takeaway materials to post on Classroom, link a way to create and build to icompass,me and Mitch will create the google form (invite for classroom in form) on tags? innovatorscompass.org Many new to the Ela to do: finalize who compass - need does what, put in place include the stuck level in concrete examples but for their examples the form also not to be instructions for \*choose a problem and a overwhelmed icompass on slides share partner Valeria and Mitch will (show this compass!). maybe still more clear FAMILY/COMMUNITY figure out how all this put in as many stucks as tech works together:) "compassy" abels for sections, make the CATEGORY: - form you want personal family/community then select categories - wordle 10+tools optional, read that apply - classroom school level the "sense" blocks aloud (or add a category? or icompass.me app
share pictures of their classroom level again and make them clearer. (curriculum, culture) individual compasses? with/for an individual Twitter chat? DETAILS

# Some stories

- 1. STEAM projects
- 2. Staff collaboration to design online learning
- 3. SEL support of current events
- 4. Parent Collaboration

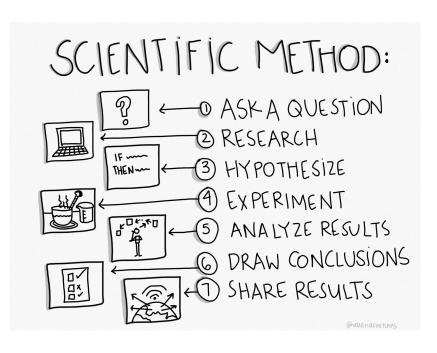


### **STEAM Projects**

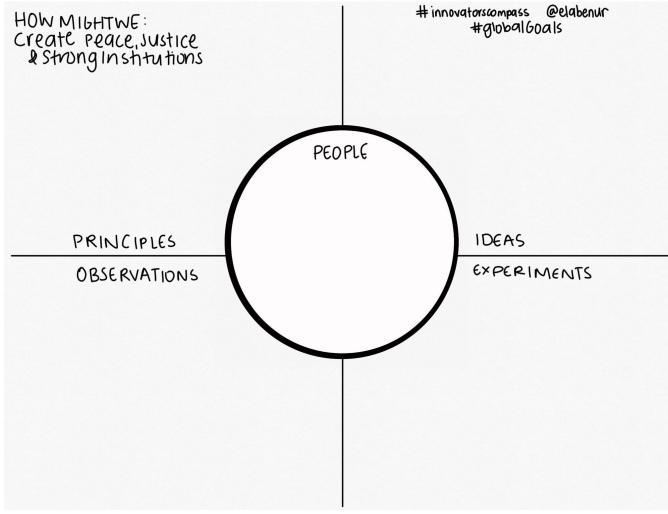
To identify, develop, iterate, communicate

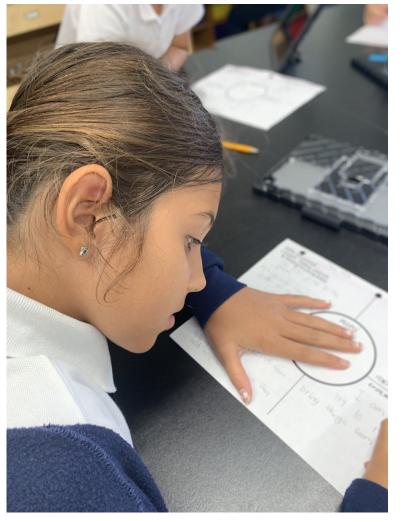
#### Topic or question

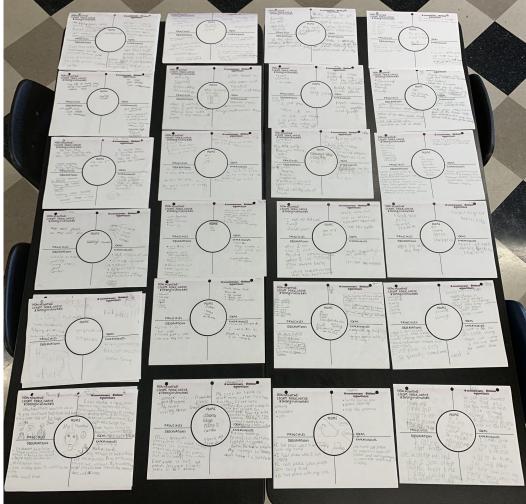




Individual exploration of topics



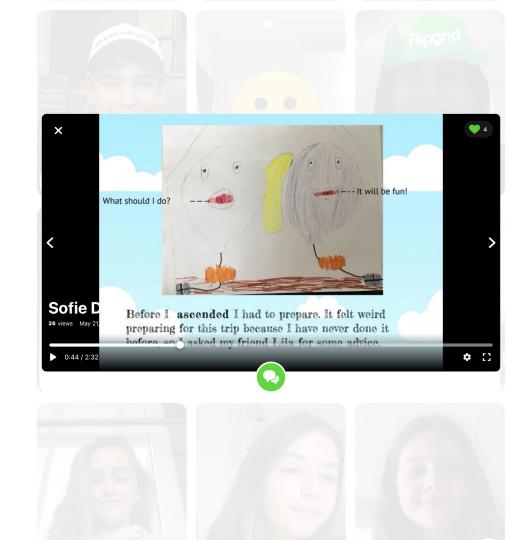




Develop and iterate observations, principles, ideas, and experiments



### Communicate



#### Reflect

### Guidelines

- Students will read and create visual notes about the Earth, Moon, and Sun.
- Students will work at their own pace but slides will be checked at various checkpoints.

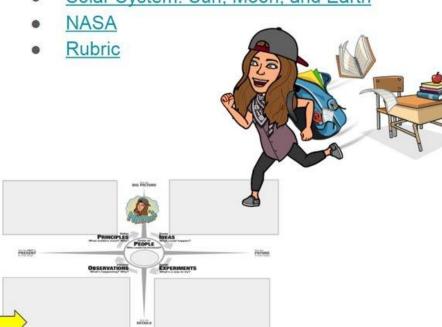
Students will answer all guiding questions on each slide.



- Student will use visuals to convey central ideas and supporting evidence. Notes are to be well structured, clearly communicating an understanding of vocabulary and concepts related to slide topic. Once visual is completed, students will upload image to appropriate slide.
- At the beginning and end of the project, Students will complete a reflection using the INNOVATORS COMPASS to evaluate what they have learned.

#### Resources, Rubric, & Notes:

- Earth, Moon, & Sun Summary Notes
- Pearson ebook
- Solar System: Sun, Moon, and Earth



# Collaborating to create online learning with other

# **STAFF**

### **Team Meetings**

#### #REMOTELEARNING MEETING



- -safety (student/faculty)
- Provide Excellence
- Be available to students
- keep students accountable
- he understanding of the realities students are living in their nomes

- Do n'il overnetim teachers with new platforms to have to learn.

PRINCIPLES

OBSERVATIONS

Need to stay home for 2 weeks/possibly more

- students have ipads
- No universal platform for all grades or all subjects

- · record lessons for students
- meet to disuss videos
- -all teachers use google class nom
- -all teachers use seesaw
- pavelop, integrated lessons pergrade Limultalisiplinanz
- -students have access to all teachers

C) 106A5 I EXPERIMENTS

SIUDENTS

PARENTS TEACHERS

ADMIN

core classes AM

Special Areas Afternoon (PM)

Set schedule/No rotating-less confising for parents or students

'200m sessions-mandatory-\*

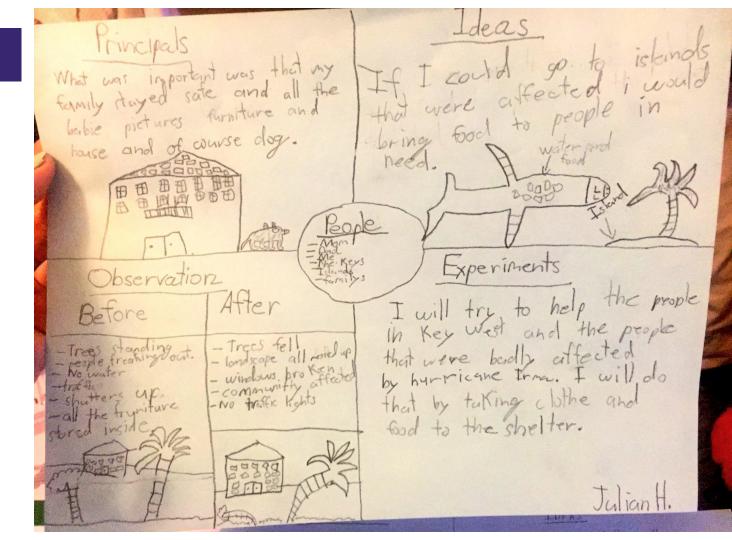
. Styrade integrated unit GEOCITY PROJECT MATH DESIGN A CITY ON MARS

SCIENCE J & DESIGNSTUDIO

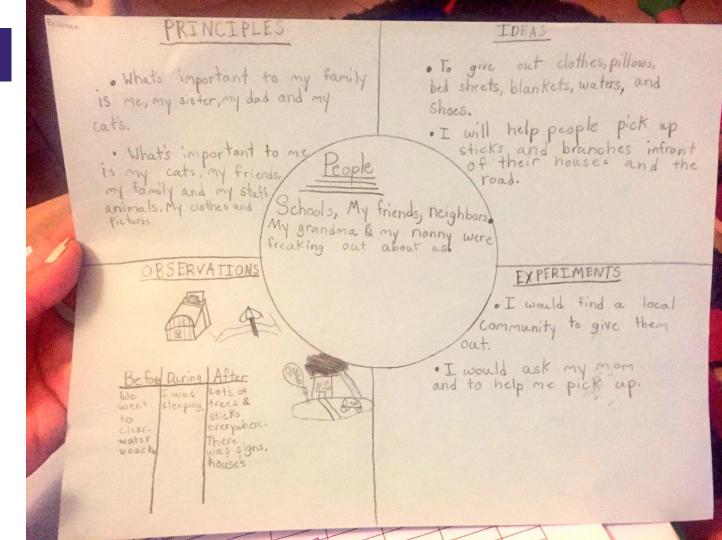
1 reading government

# Supporting students through current events with **SEL**

Exploring individual experiences and ideas



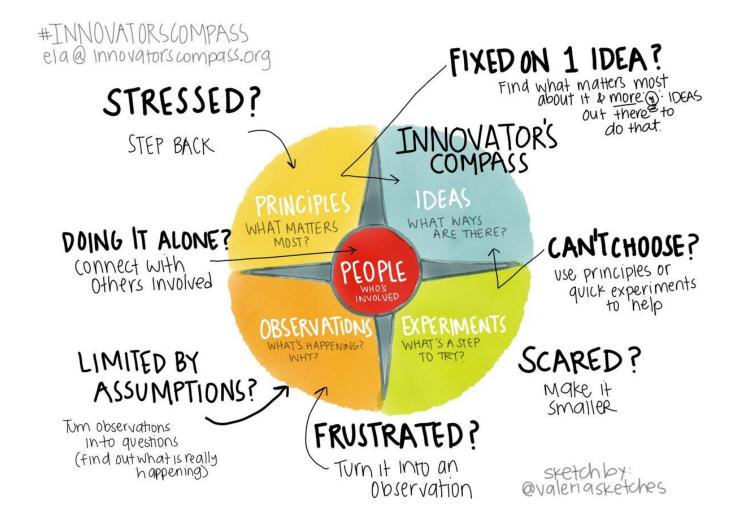
### Exploring individual experiences and ideas



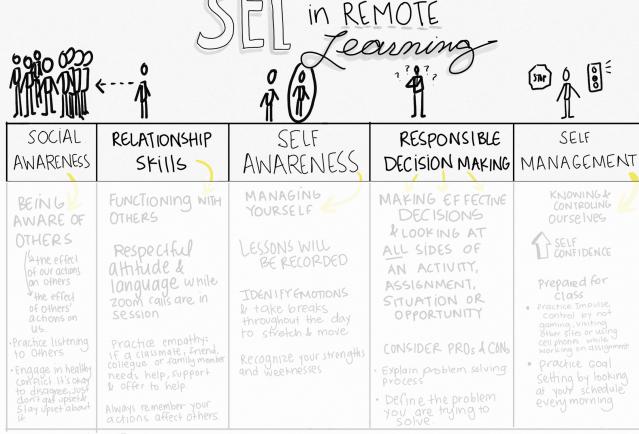
### Sharing experiences and ideas



### Using these STEM skills in any SEL moment



...builds SEL skills



Sketched W: @valeriasketches

THESE ARE THE SKILLS WE HAVE BEEN PRACTICING IN UNYTED WHW. UNYTED CO

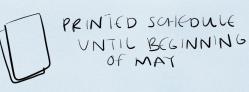
SELF

KNOWING&

SELF

# Collaborating with **Parents**

Parent/Teacher - Empower students to take ownership Meeting - Prepare them for 5th grade - organization - SELSKILLS - create opportunities for Felly to shift to Higher order thinking - communication - adjusting to new model PEOPLE Fellx PRINCIPLES Parent5 N/S.Valeria OBSERVATIONS -Doesn't seem to like challenging Others' views - Doesn't answer first too often - seems like he may be waiting for others Lack of confidence not winting to challenge others -lack of interest > lack of understanding - homework when reminded MAYBEFROM NOT HAVING COMPLETED &classwork LHigher Order Recall VS Applying thinking lowest level of Analyzing Likes Reading Blooms Taxonomy



- construct meaning from oval, written into

OPLE - summerize - infer, explain - Break down topics into parts

IDEAS

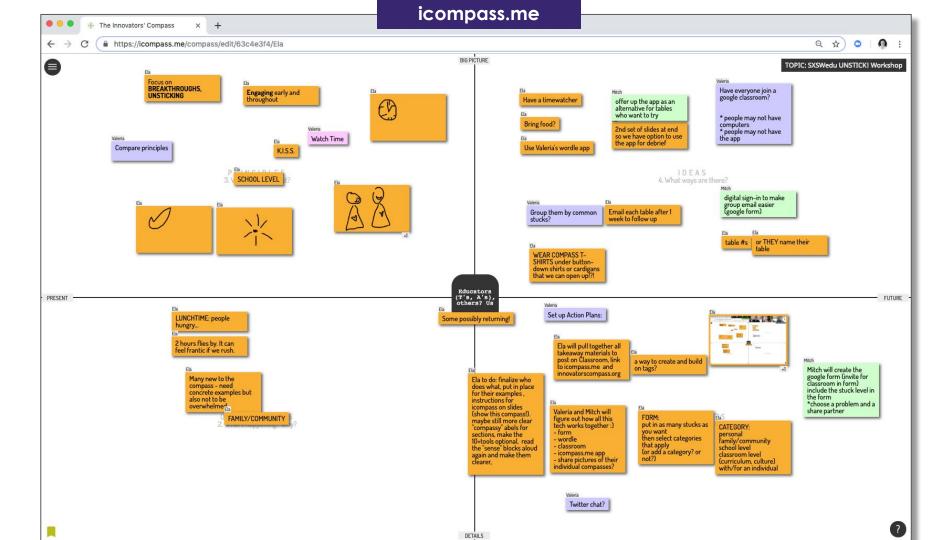
EXPERIMENTS WHAT ARE WE WILLING TOTRY

I take time to think about "WHY" to

O replay activities on SEL Platform

# LET'S USE IT!

To share Observations and Ideas about Teaching STEM in COVID Times

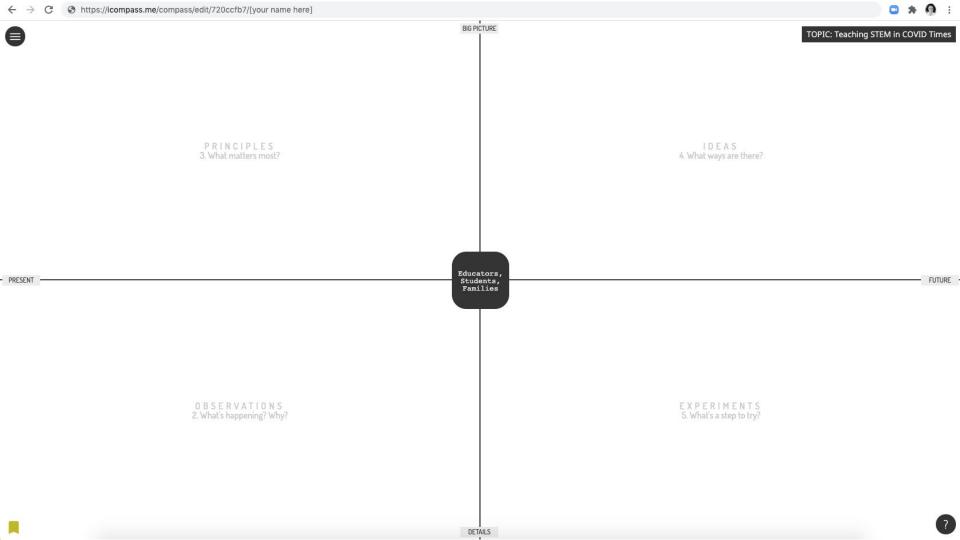


# Welcome to this workspace!

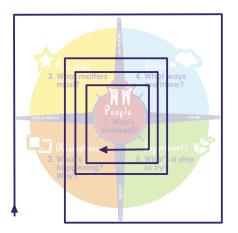
Please enter your name as it would appear to others:

Submit

Cancel



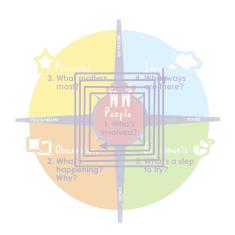
### Scientific Method, Design Thinking and A LOT more...



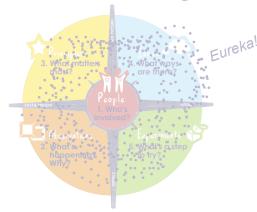
**Tinkering & Improvising** 

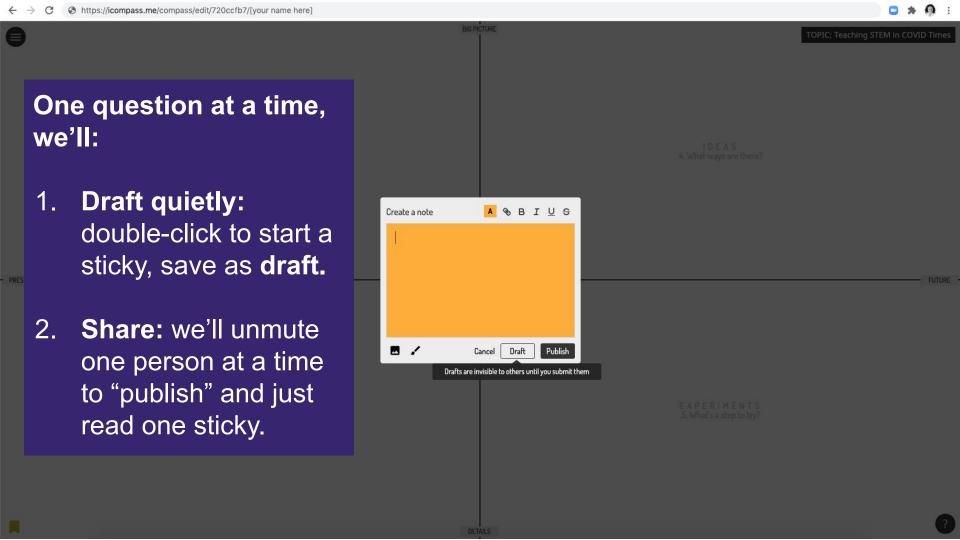


#### Lean/Agile startups



"Accidents" & "Sudden genius"





### LET'S GO!

Teaching STEM in COVID Times: icompass.me/compass/edit/720ccfb7