

# Project Busters



*21st Century Out of School  
Fuller Middle School*



# Schedule



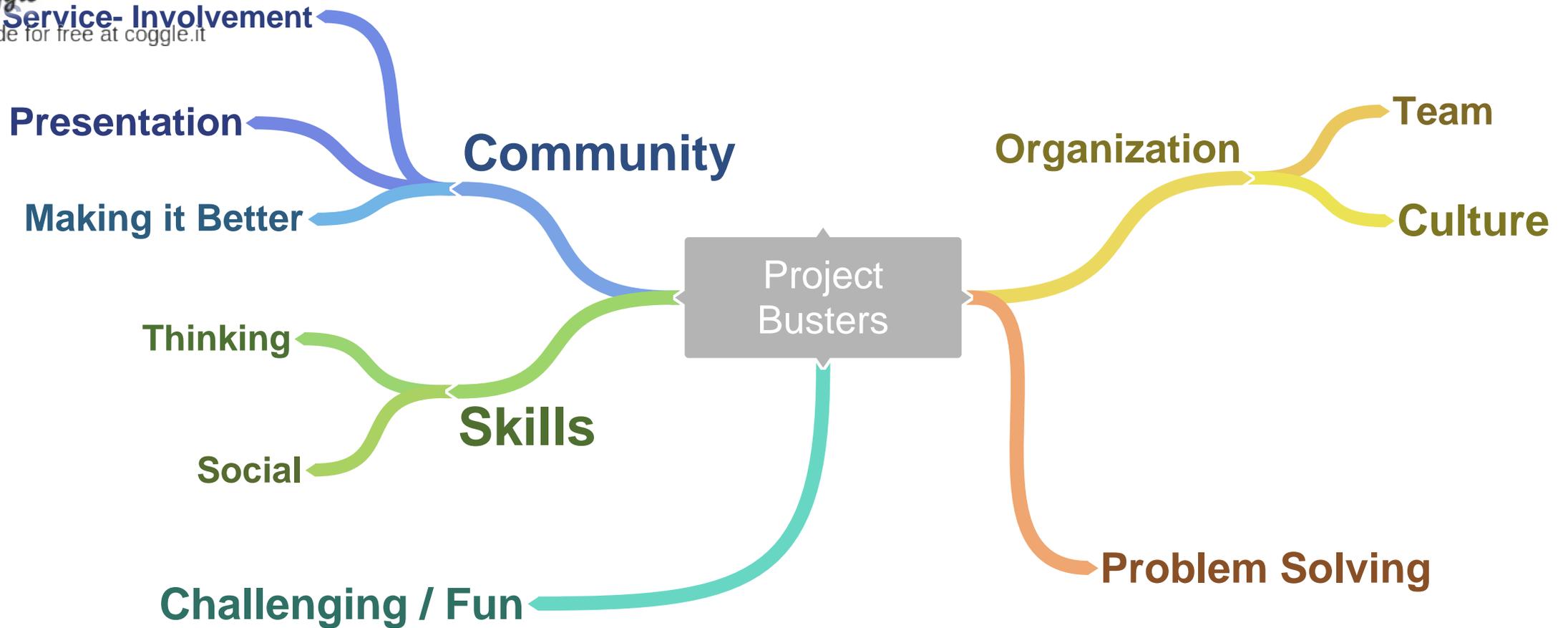
- Get to know each other
- Create an environment to work in
- Why are we going to be successful
- Pick a problem to work on
- Use the problem-solving process to collect ideas and pick a good solution
- Create a presentation board that shares your work with other
- Celebrate



# What's Project Busters about?

*coggle*

made for free at [coggle.it](http://coggle.it)



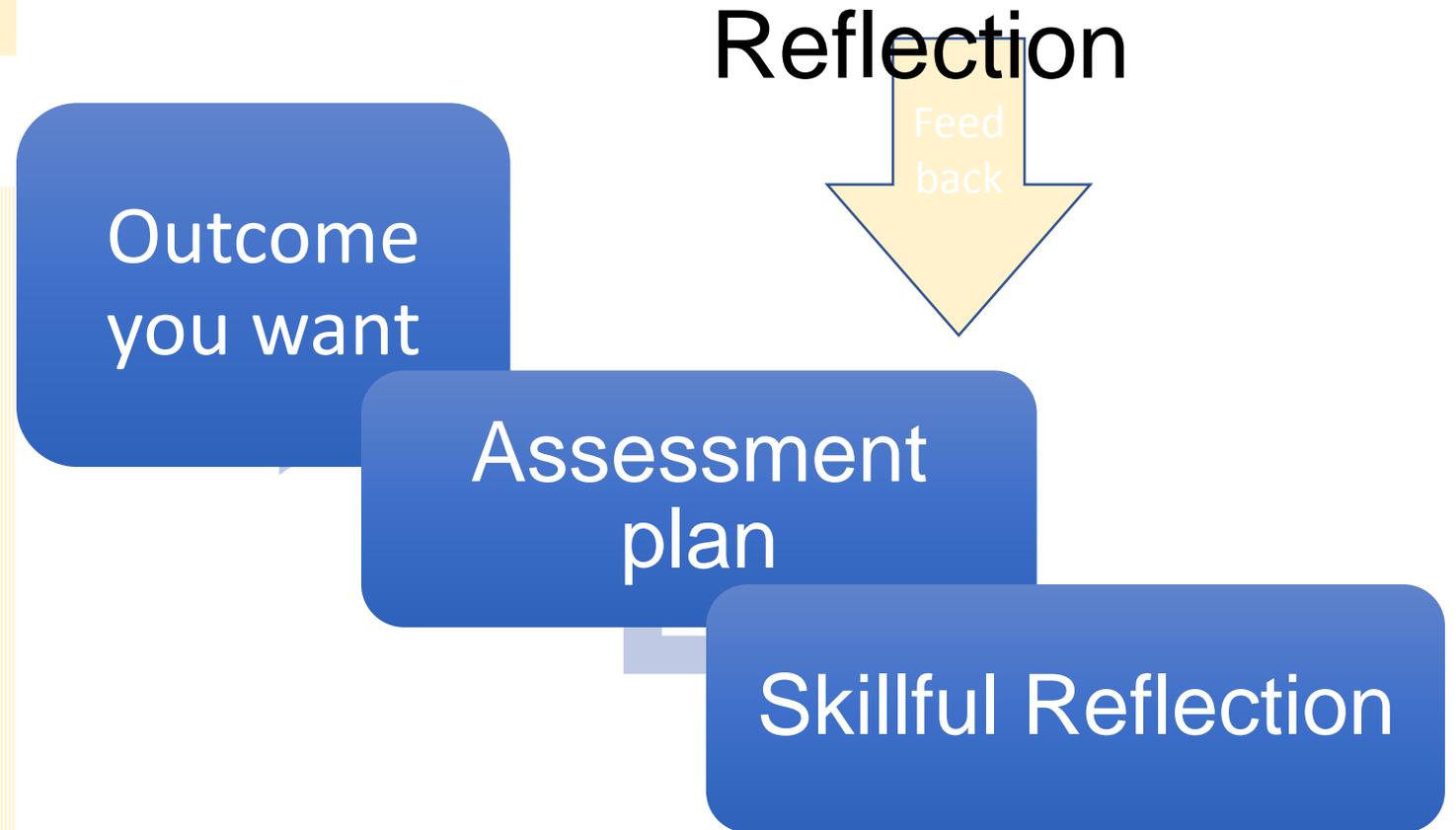
Me		Fun
Project-Academy		Values
You	You-You	work together
Team	Roles	You-Community
Solve the problem	Assessment/ Reflection	Rubrics
Ownership-of-your-outcome		

# Results & Outcomes

- **Supporting the community ... involvement(Civics)**
- **Fun Activity**
- **Quality & Feedback in Learning**
- **Learning thru doing and mistakes**
- **Presenting your solutions**
- **Building social & thinking skills**

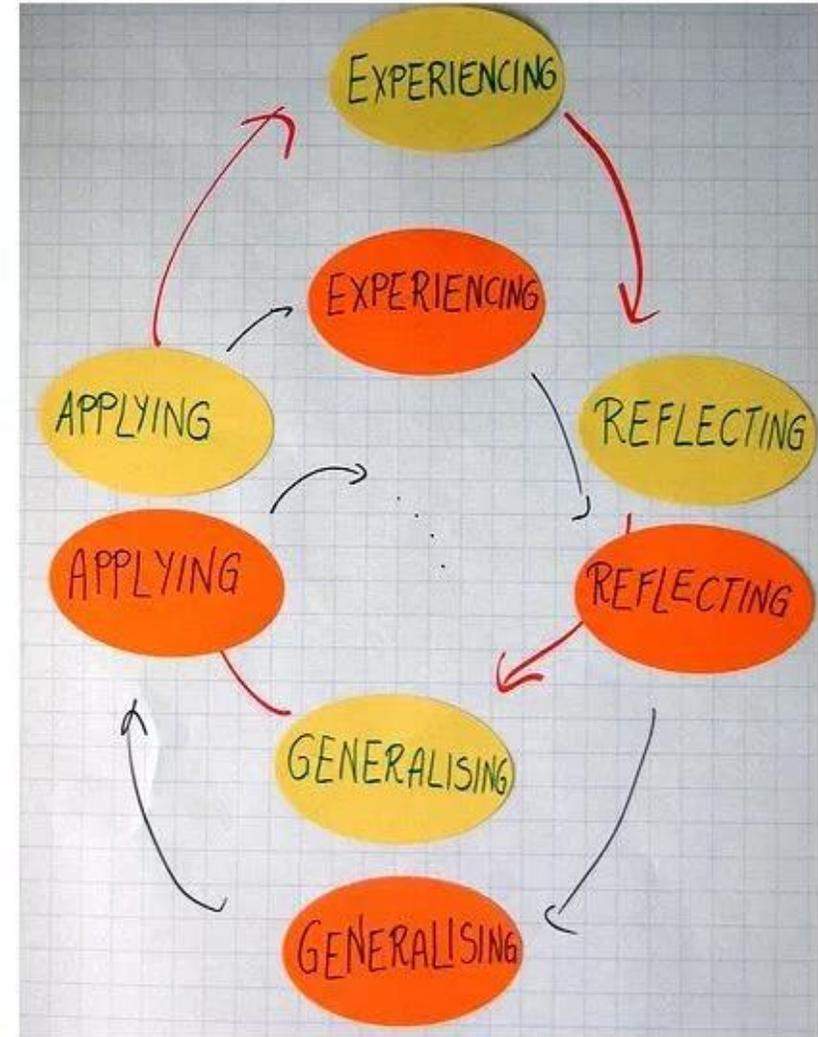
# Ownership

**Engage students as leaders of their own Learning**



# Lesson 1 ... Introduction

- Project Busters ... Doing good for our community
- To maintain the state of doubt & to carry on systematic & protracted inquiry on these are the **essentials of thinking**



# Get to know each other

Candle problem to solve

Organize your self and create a list of the # of function these flashlight do. The winner has the highest verified # ... 5 minutes

# Learning Objectives:

- **Getting to know one-another as a community**
- **What this club is about**
  - **Solving problems to help community**
  - **Learning skills to interface with our community**

Expectations (Attitudes and Behaviors)

# Introduction of Bill Wolfson & Project Academy

- Organization of the Project
- Roles of students, facilitator, other stakeholders  
(need empathy)
- Our habits ... attendance is important
- Collaboration
- Project-based learning

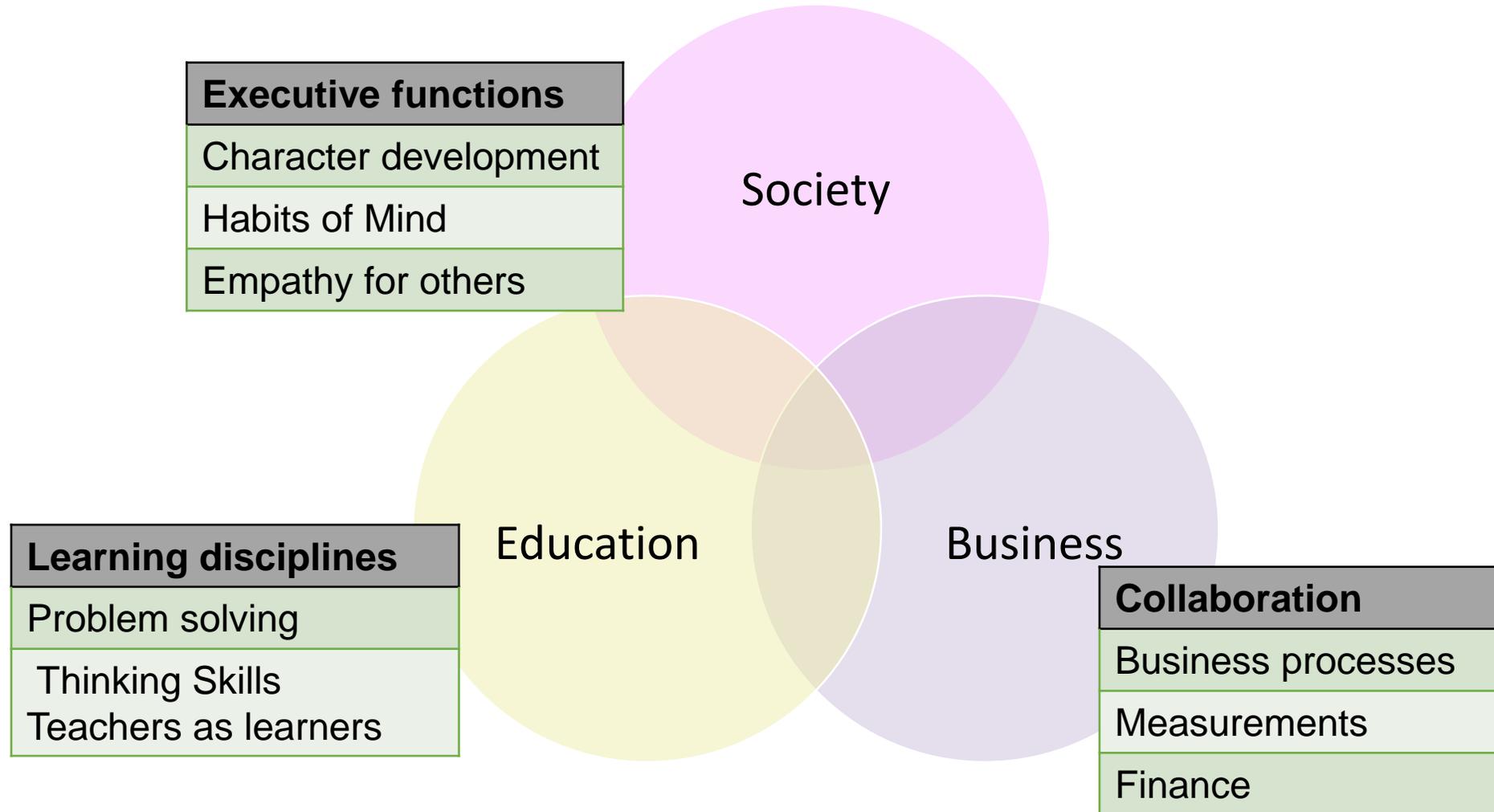
# About You:

- What do you want to get out of this class?
- Any specific career or college goals do you have?
- Society Goals?

# Our Goals

- Have Fun ... Doing a project
- Be better at the interface of society, education and business ... **What does this mean?**

# Life Skills (Holistic Approach)



# Introduction Video ... Project Academy



“The bigger the problem, the bigger the opportunity” (*Vinod Khosla*).

- Play first <https://youtu.be/f9LM88h-I-U>

Problem Solving Process... Team creates their version



Show Olin's process

## Problem Solving

- Problem Framing
- Requirements/Research
- Many Designs
- Pick a few Solutions
- Testing/ Feedback
- Reporting...public product

Iterative process

Divergent/Convergent thinking

Mark Somerville .. Olin College



# Lesson 2 & 3

15 minutes	What are our values
15 minutes	Forming the team
15 minutes	Roles
15 minutes	Team charter



# Key Questions:

- What is our classroom culture? (How are we going to operate?)
- What are our learning targets, goals for the class?
- How do we want to be measured?
- How do we want to be treated in the group?
- What is a team and how do we create it?

# What is our classroom culture? (How are we going to operate?)

- **Culture?** Discussion
- The school will foster a **Team/community** based culture of a learning environment, with all treated as adults and with respect.
- **Key words are:** Discussion
- Respect, Empathy, Kindness, Curiosity, Innovation, Persisting, Flexibility, Continuous learning, Humor and Taking responsible risk.

# Values

Evidence, Respect, Empathy, Kindness,  
Curiosity, Innovation, Persisting,  
Flexibility, Continuous learning,  
Commitment, Buy-in, Humor and Taking  
responsible risk.

# Team Set-up

Acting like a sports team... When playing... everyone is committed!

- Form Teams... Count 1,2,3
- Team captain, Team scribe, Team scheduler, Team tracker, Team public reporter, Advisory officer, Team tester

**Create a Team Charter**

- **Overview of the project**
- **Measurable team goals, roles, Deliverables**
- **How will we measure success?**
- **Expectations ... How are we going to work together? Handle conflicts?**

# Team Charter

- Overview of the project
- Measurable team goals, roles, Deliverables
- How will we measure success?
- Expectations ... How are we going to work together? Handle conflicts?

# Lesson 4

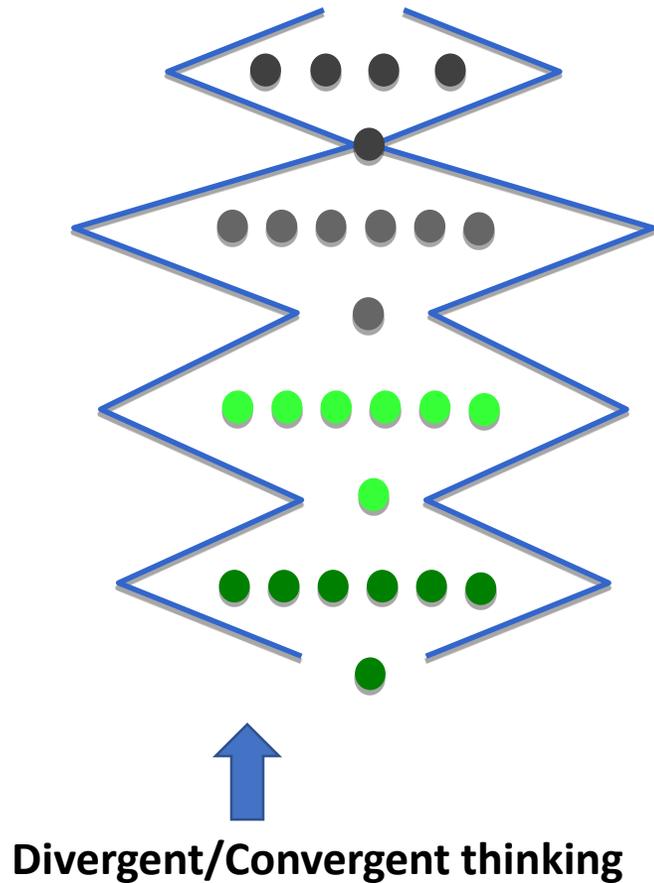
# Define the Essential Question or Problem for the Unit

- Is open-ended; that is, it typically will not have a single, final, and correct answer.
- Is thought-provoking and intellectually engaging, often sparking discussion and debate.
- Calls for higher-order thinking, such as analysis, inference, evaluation, prediction. It cannot be effectively answered by recall alone.
- Points toward important, transferable ideas within (and sometimes across) disciplines.

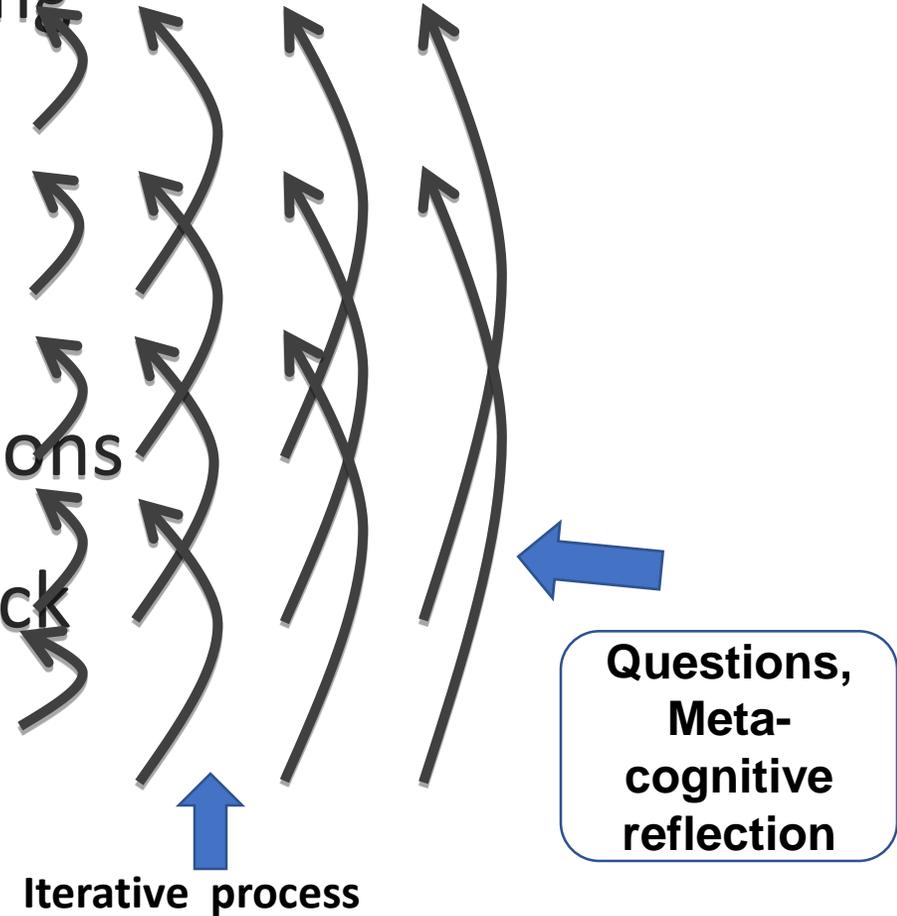
# Problem Framing

- Review and pick problem to solved... Write it done:
- **The Problem Is To Know What the Problem Is**
- **The definition of the problem will be the focal point of all your problem-solving efforts.**
- As such, it makes sense to devote as much attention and dedication to problem definition as possible. What usually happens is that as soon as we have a problem to work on we're so eager to get to solutions that we neglect spending any time refining it.

# Problem Solving



- Problem Framing
- Requirements
- Many Designs
- Pick a few Solutions
- Testing/ Feedback
- Reporting



Community

