



# Cultivating a Culture of Continuous Inquiry and Learning

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Research  
Challenges  
facing many  
NC Community  
Colleges

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**Limited institutional research talent pool**

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**Inadequate institutional research  
professional development opportunities**

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**Antiquated reporting capabilities**

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**Insufficient access to timely information  
and peer analysis**

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**Institutional culture**

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**Conflicting priorities**

# EXCELLENCE IN RESEARCH AND ANALYTICS

## FOUNDING PARTNERS



John M Belk  
Endowment  
ELEVATE THROUGH EDUCATION



NC STATE  
UNIVERSITY  
College of Education

# NORTH CAROLINA COMMUNITY COLLEGES

## Excellence in Research and Analytics



2017-2020  
Strategic Framework

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# EXCELLENCE IN RESEARCH AND ANALYTICS

## 2017-2020 STRATEGIC FRAMEWORK

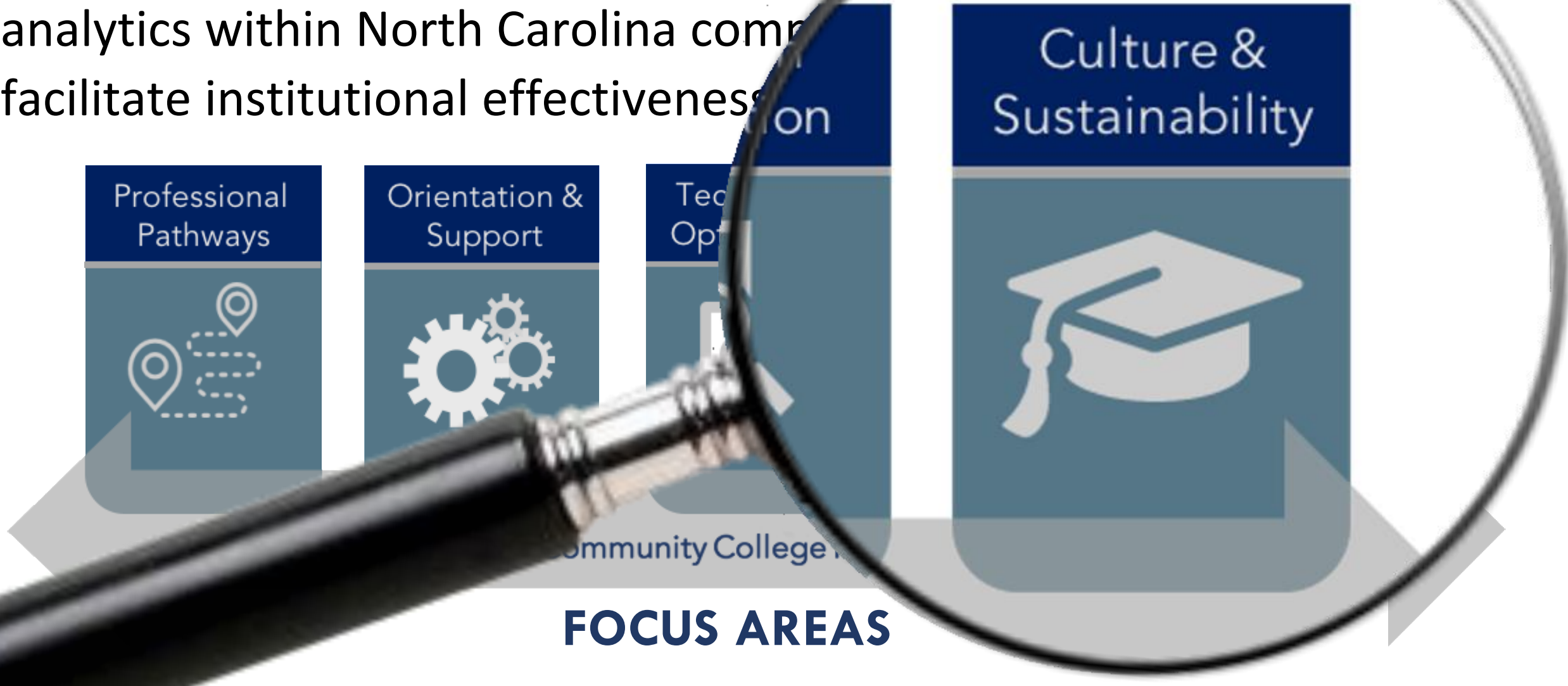
**PURPOSE:** Promote, support, and build the capacity for research and analytics within North Carolina community colleges in order to facilitate institutional effectiveness with a focus on student success.



# EXCELLENCE IN RESEARCH AND ANALYTICS

## 2017-2020 STRATEGIC FRAMEWORK

**PURPOSE:** Promote, support, and build research and analytics within North Carolina community colleges to facilitate institutional effectiveness.





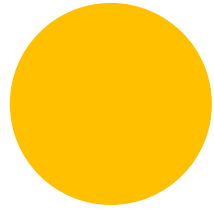
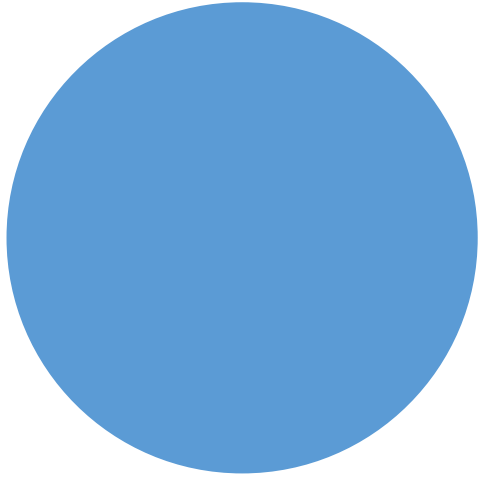
# Cultivating a Culture of Continuous Inquiry and Learning



cul·ti·vate  
['kəltə,vāt]

- To prepare
- To dig up
- To work
- To grow
- To improve
- To develop





# Daily Habits

“You don’t create your future. You create daily habits, and they create your future.”

- Randy Gage



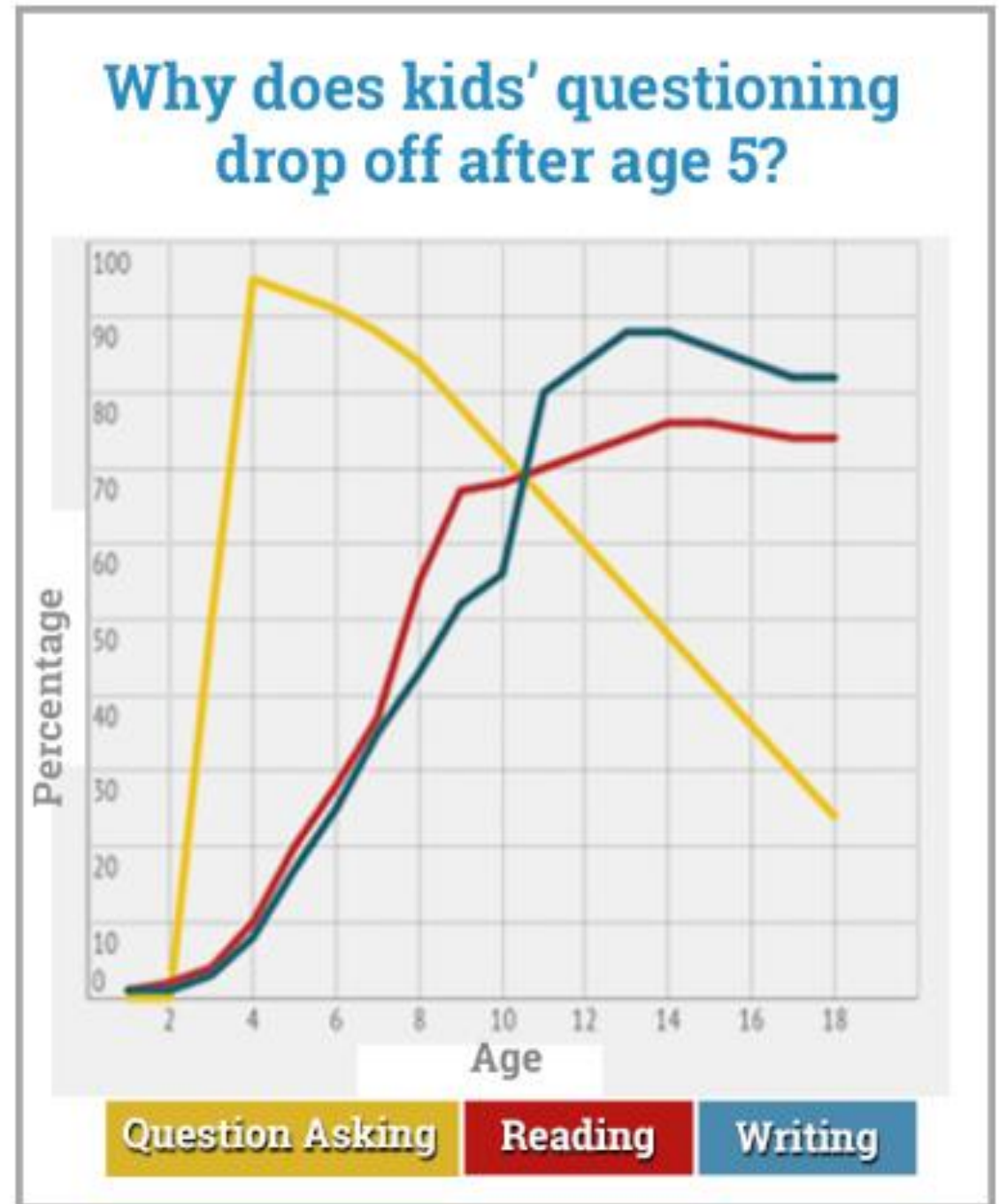
cu·ri·os·i·ty  
[,kyoorē'äsədē]

- A desire to know
- A desire to learn
- Interest
- Inquiry
- Inquisitiveness
- A rare or novel thing

# Why We Stop Questioning (And Why it Matters)

- Why does questioning decline sharply when students enter school? Why should we care?
- Can we teach ourselves to question? What are the most important types of questions?
- How do we encourage question asking in our organizations?

Berger (2014, p.44)





How many google searches per day?

Google Search

I'm Feeling Lucky





How many google searches per day?

Google Search

I'm Feeling Lucky

40,000 every second  
3.7B every day  
1.2T every year

# Teaching ourselves to question

Berger (2014, p. 51)

---

**Evidence:** How do we know what's true or false? What evidence counts?

---

**Viewpoint:** How might this look if we stepped into other shoes or looked at it from a different direction?

---

**Connection:** Is there a pattern? Have we seen something like this before?

---

**Conjecture:** What if it were different?

---

**Relevance:** Why does this matter?

# Daily habits that cultivate curiosity

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Ask questions

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Become a listener

---

Become an observer

---

Expand and diversify your social  
circle and knowledge domains

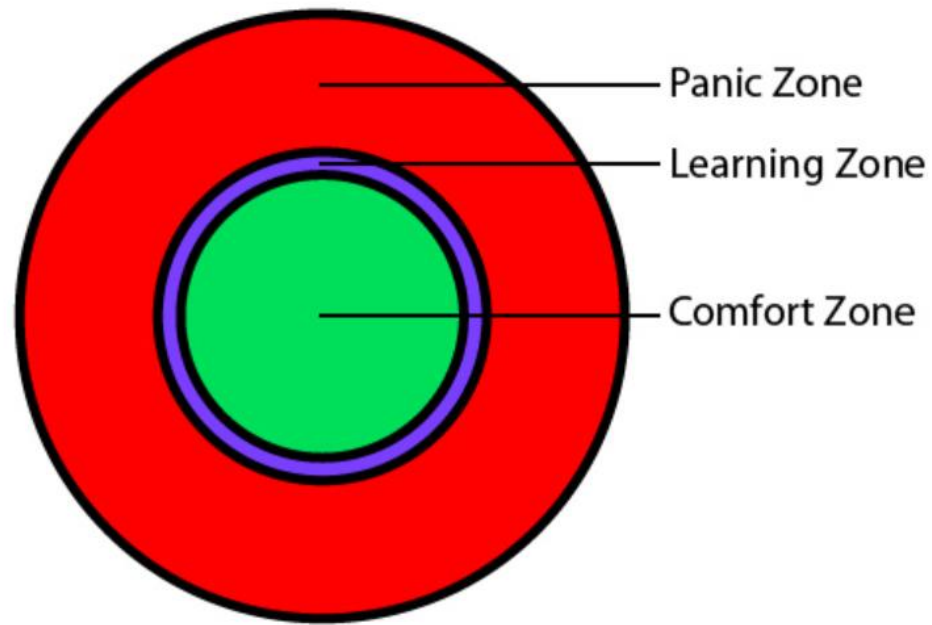
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Take risks for the sake of learning

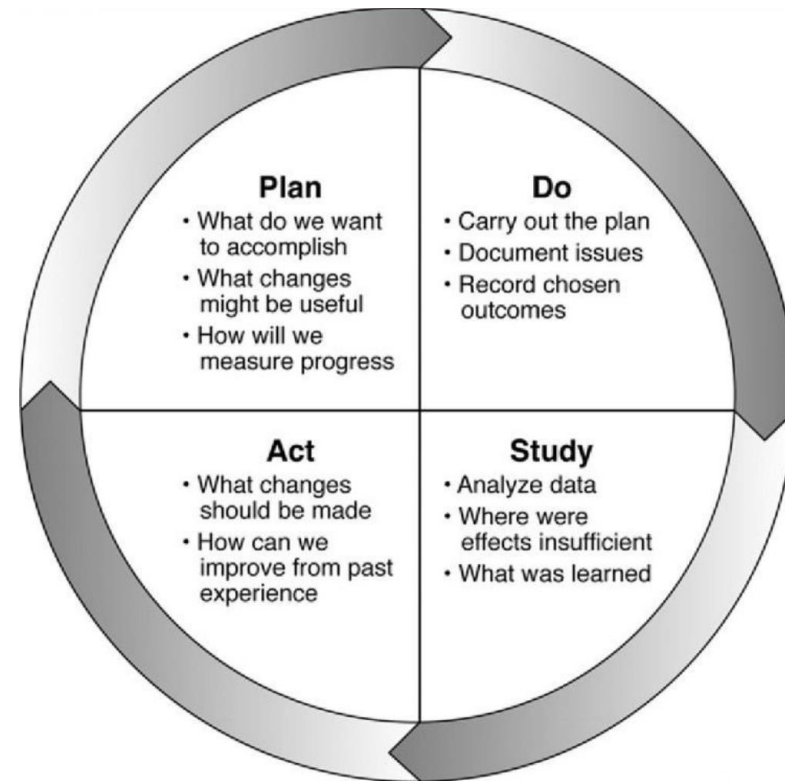
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Be willing to act

## Zones of Learning



## Plan-Do-Study-Act Inquiry Cycle





NEW YORK TIMES BESTSELLER

# A CURIOUS MIND

The SECRET to a BIGGER LIFE

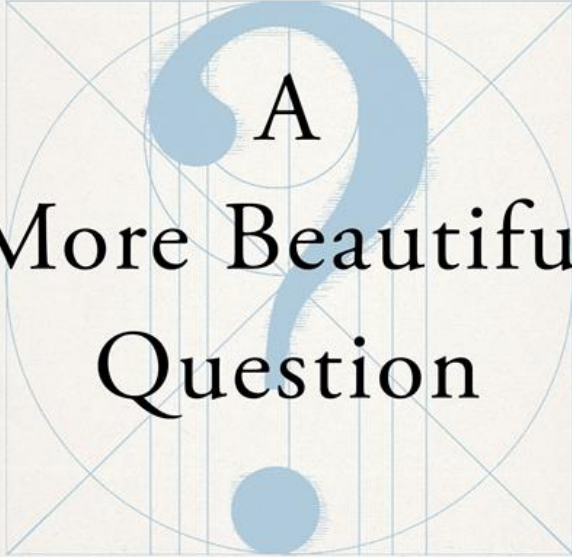


BRIAN GRAZER

CHARLES FISHMAN

"What's keeping you from reading this book right now?  
It's worth it. Deep and challenging and useful." —SETH GODIN,  
*author of The Icarus Deception*

THE POWER OF INQUIRY  
TO SPARK  
BREAKTHROUGH IDEAS



# A More Beautiful Question

WARREN BERGER

BLOOMSBURY



cre·a·tiv·i·ty  
[ˌkrēā'tivədē]

- Use of the imagination
- Seeing anew
- Innovation
- Originality
- Individuality
- Formation of something new and valuable

# FLOP





Change Your Questions, Change Your...

...Perspective

...Work

...Life

The SCAMPER Technique  
for Creative Problem Solving

1. Isolate the challenge or topic you want to think about

2. Ask SCAMPER questions

---

**S**

---

**C**

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**A**

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**M**

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**P**

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**E**

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**R**

What can we  
*substitute* for  
our current  
process?

---

## Substitute Something

---

C

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# Substitute

---

What can be substituted? Who else?  
What else?

---

Can the rules be changed?

---

Can we use other materials?

---

Other processes or procedures?

---

Other power?

---

Other places?

---

Other approaches?

---

What else instead? What other part  
instead?



What can we  
*combine* with  
it to make  
something  
else?

---

S

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**Combine it with something else**

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# Combine

---

What ideas can be combined?

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Can we combine purposes?

---

---

How about a blended method?

---

---

What other item could be merged with this?

---

---

What can be combined to multiple possible uses?

---

---

Combine appeals?

---

What can we  
*adapt*  
someone  
else's  
methods?

---

S

---

C

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**Adapt something to it**

---

M

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R

# Adapt

---

What else is like this?

---

What other idea does this suggest?

---

Does the past offer a parallel?

---

What could we emulate?

---

What ideas outside my field could I incorporate?

How can we  
*modify* or  
*magnify* the  
way we do it?

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S

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C

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A

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**Modify or magnify it**

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P

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E

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R



# Magnify or Modify

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What can be magnified, made larger, or extended? More time? Extra features?

---

---

What can be duplicated?

---

---

What can add extra value?

---

---

How could we carry it to a dramatic extreme?

---

---

What other form could this take?

---

---

What changes could be made in the plans or the process?

---

How can we  
put this  
process to  
*other uses?*

---

S

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C

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**Put it to some other use**

---

E

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R

## Put to other uses

---

What else can this be used for?

---

Are there new ways to use it as is?

---

What else could be made from  
this?

---

What other fields could use this?  
How would they approach it  
differently?

What can we  
*eliminate*  
from the way  
we do it?

---

S

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C

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**Eliminate something**

---

R

# Eliminate

---

What if this were smaller?

---

What are we currently doing that we could omit?

---

Should we divide it or split it up?  
Separate it into its parts?

---

Can the rules be eliminated?

---

What is not necessary?

What  
*rearrangement*  
of the process  
might be  
better?

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**Reverse or rearrange it**



Reverse or  
rearrange it

---

What other arrangement might be better?

---

---

What other patterns or sequences exist?

---

---

Can we change the process or order?

---

---

Can we change the pace?

---

---

What are the negatives?

---

---

What would it look like to do the unexpected?

---

Michalko (2006, p. 72-111)

# SCAMPER

---

**Substitute** something

---

**Combine** it with something else

---

**Adapt** something to it

---

**Modify** or magnify it

---

**Put** it to some other use

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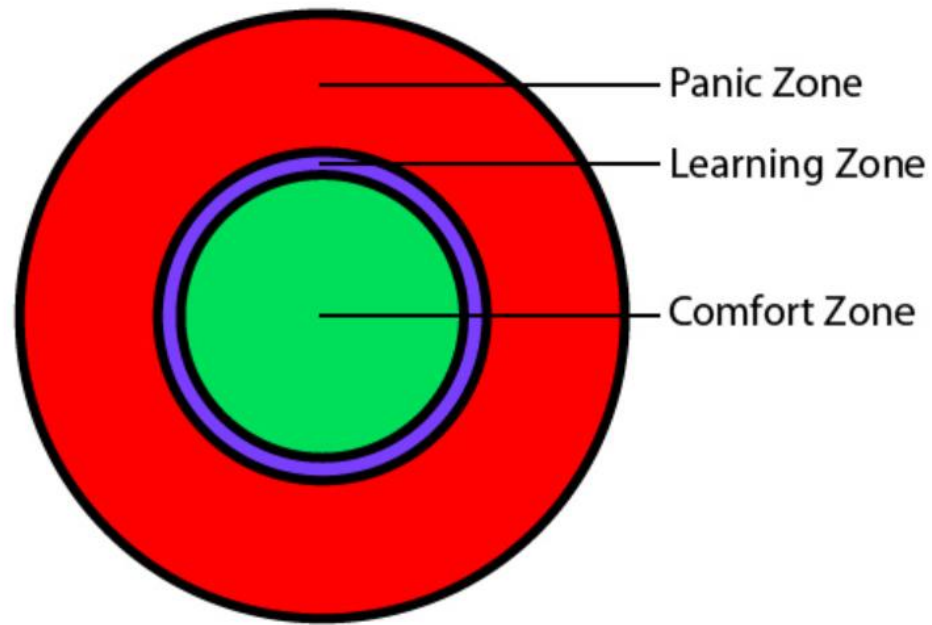
**Eliminate** something

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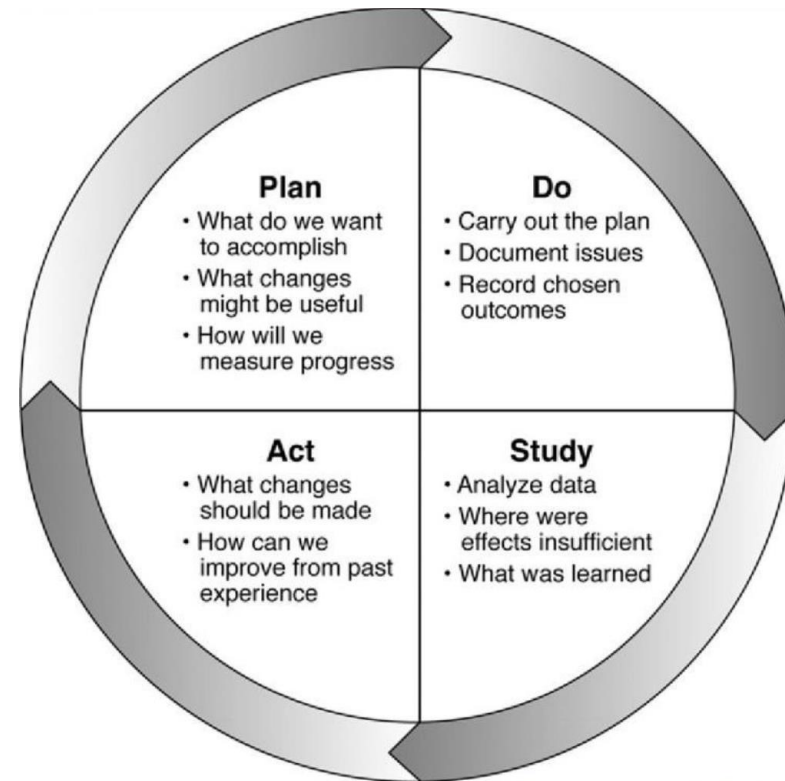
**Reverse** or rearrange it

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## Zones of Learning




## Plan-Do-Study-Act Inquiry Cycle



# Lateral Thinking

*Creativity  
Step by  
Step*



*Edward  
de Bono*

# THINKERTOYS

SECOND EDITION

"Designed to change the way you think."

—Wall Street Journal



a handbook of creative-thinking techniques

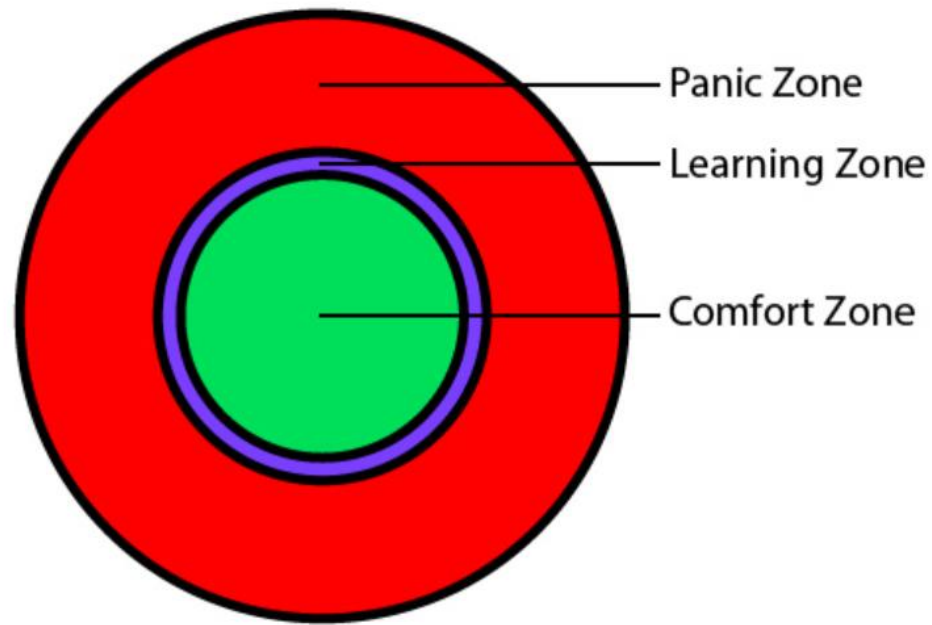
MICHAEL MICHALKO



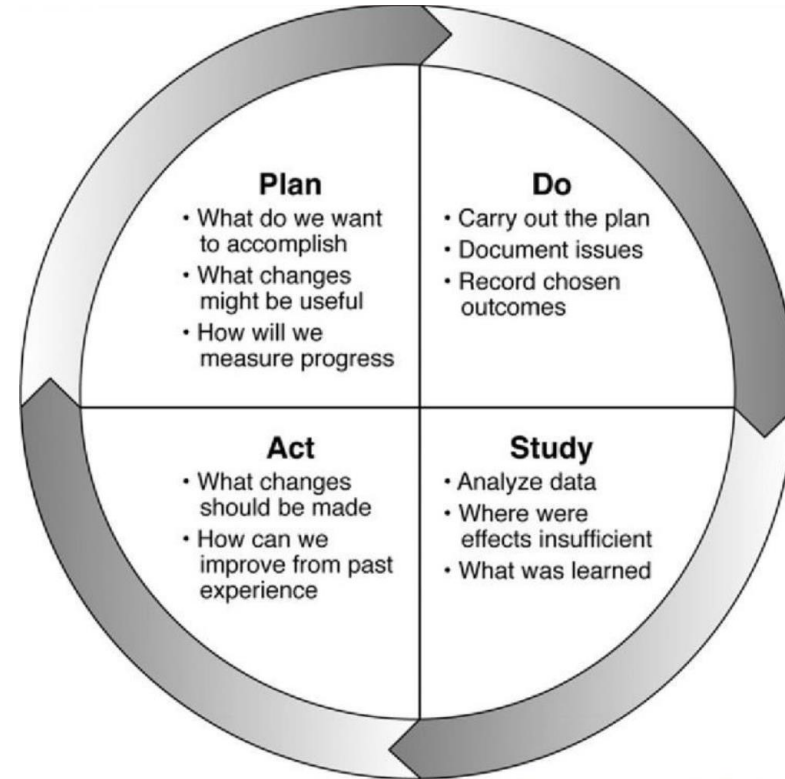
col·lab·o·ra·tion  
[kəˌlabəˈrāSH(ə)n]

- Working with others to produce or create
- Joining
- Partnership
- Teamwork
- Participation
- Cooperation

## Zones of Learning



## Plan-Do-Study-Act Inquiry Cycle

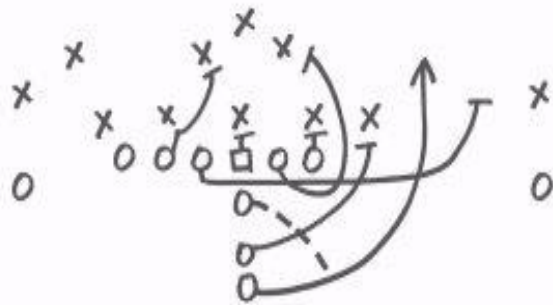




# GREAT TEAMS

## 16 THINGS

HIGH PERFORMING ORGANIZATIONS  
DO DIFFERENTLY



**DON YAEGER**

9-TIME *NEW YORK TIMES* BESTSELLING AUTHOR



*Creating and Leading  
Cultures of Inquiry*

**LAURA LIPTON • BRUCE WELLMAN**

# Common Dilemmas for Teams

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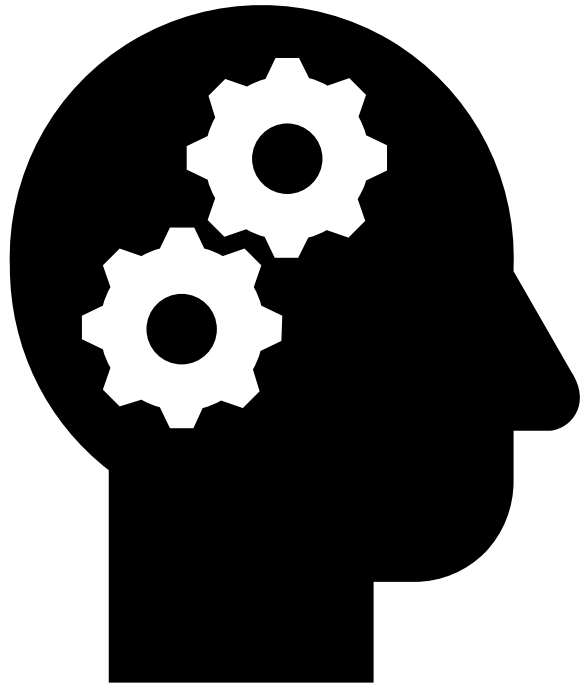
**Commitment without community**

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**Time without tools**

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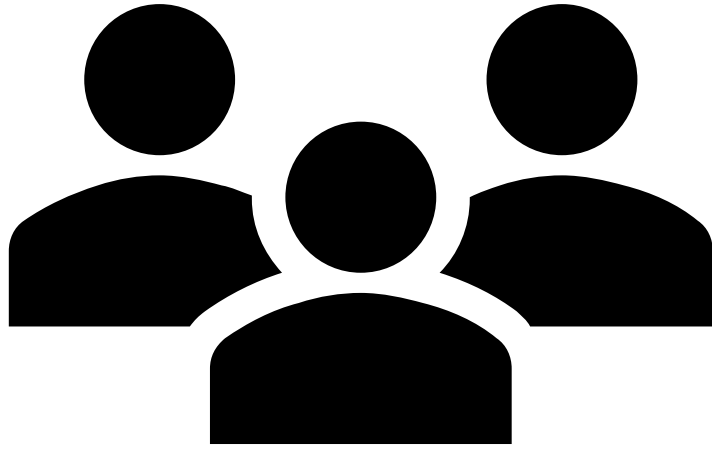
**Data without deliberation**



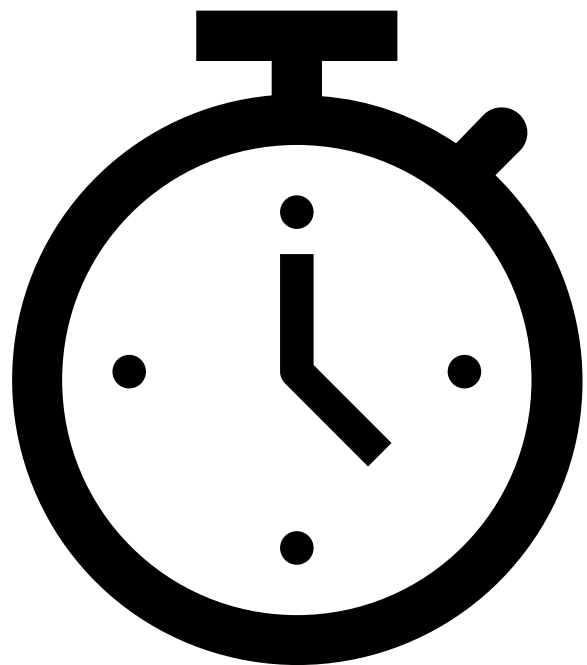
# Understanding the “WHY”

- Develop and communicate a shared vision
- Use story telling and shared experiences to help people feel and connect with the “why”
- Create a sense of urgency
- Actively and regularly focus and re-focus the team on the “why” as you figure out and navigate the “what”

# Effective Management

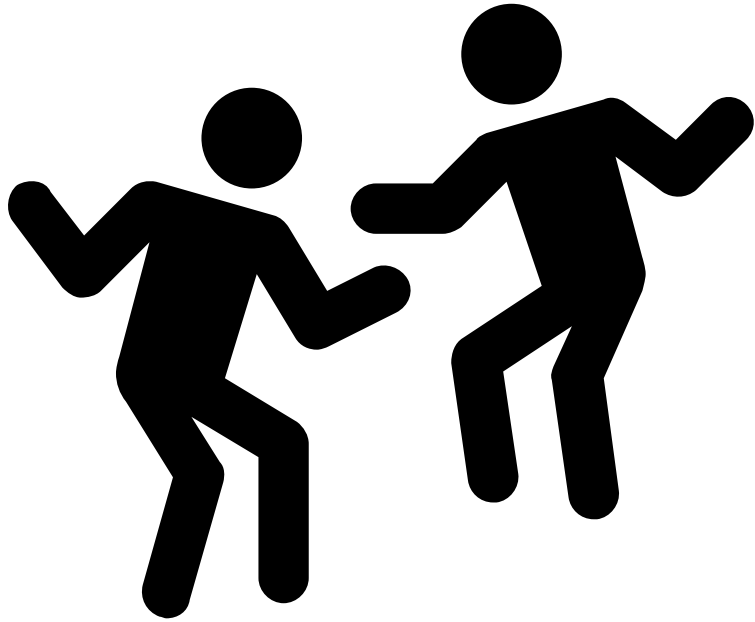


- Dedicate time to exploring team member strengths and styles (self and group reflection)
- Distribute roles and responsibilities based on strengths not title or position
- Recruit the right talent
- Create and maintain depth
- Develop a roadmap that illustrates both the destination and the way
- Create camaraderie – trust, accountability, and togetherness



# Activating Efficiency

- Manage dysfunction, friction, and strong personalities
- Inspire teaching and learning at every opportunity
- Plan for effective transitions
- Embrace change
- Be focused and disciplined in execution



# Mutual Direction

- Rely on internal and external scouting
- Ask critical questions; listen attentively
- See what hasn't been seen
- Evaluate risks and costs and set priorities
- Create and celebrate mini-goals
- Avoid the pitfalls of success



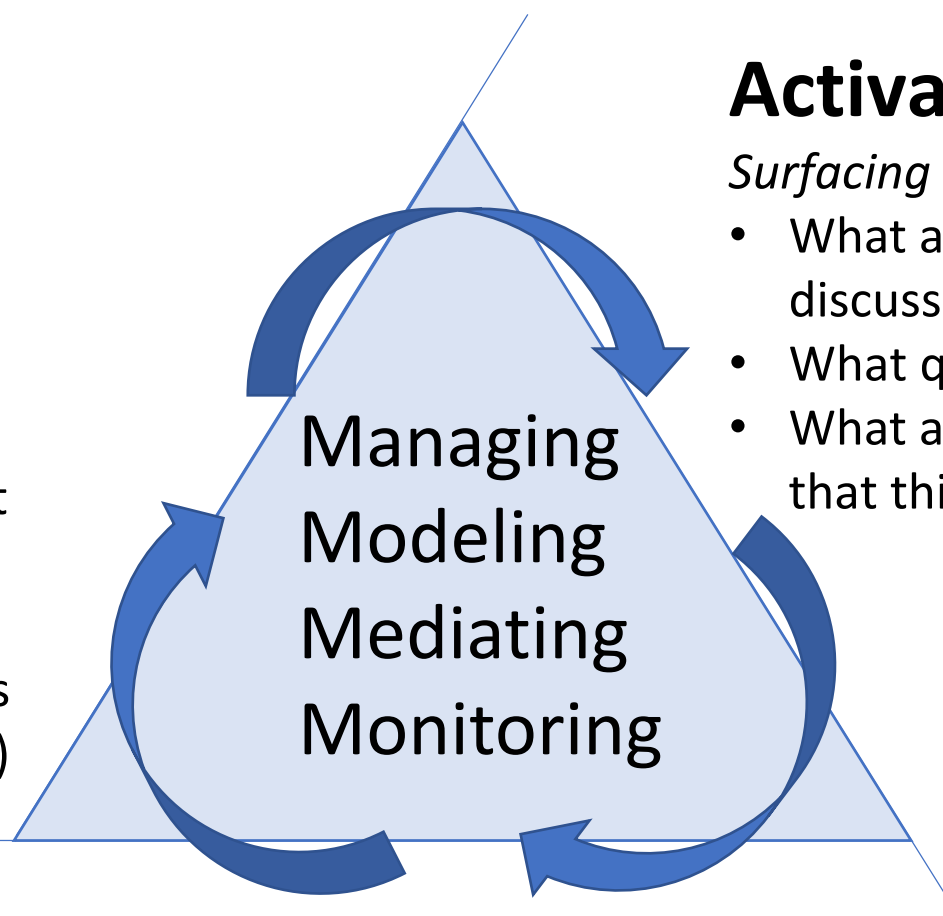
## Organizing and Integrating

*Generating theory and informing practice*

- What inferences, explanations, or conclusions might we draw? (causation)
- What additional data sources might we explore to verify our explanation? (confirmation)
- What solutions might we explore as a result of our conclusions? (action)
- What data will we need to collect to guide implementation? (calibration)

# The Collaborative Learning Cycle

Wellman & Lipton (2004) in Lipton & Wellman (2012, p. 26)



## Activating and Engaging

*Surfacing experiences and expectations*

- What assumptions do we bring to this discussion?
- What questions are we asking?
- What are some possibilities for learning that this experience presents to us?

## Exploring and Discovering

*Analyzing the data*

- What important points seem to pop out?
- What patterns, categories, or trends are emerging?
- What seems to be surprising or unexpected?
- What are some ways we have not yet explored these data?

# Activating & Engaging Tools and Strategies

- Re-center around the “why”
- Develop predictions using blank charts and graphs and identify assumptions that guide predictions
- Distinguish between predictions and assumptions
- Create an open environment where all opinions are valued by accepting and encouraging different perspectives



# Exploring and Discovering Tools and Strategies

- Build in time to critically explore and digest the data
- And/or distribute in advance of meetings or allow time for follow-up after
- Ensure discussion is balanced between experienced and novice data consumers
- Record rough and refined observations
- Record questions



## Exploring and Discovering

*Analyzing the data*

- What important points seem to pop out?
- What patterns, categories, or trends are emerging?
- What seems to be surprising or unexpected?
- What are some ways we have not yet explored these data?

# Organizing and Integrating Tools and Strategies

- Generate multiple theories of causation - These tend to fall into one of the five categories: (1) curriculum, (2) instruction, (3) faculty/staff, (4) students, or (5) institution/infrastructure
- Seek additional data.
- Identify multiple solutions. Evaluate the benefits and drawbacks of each.
- Create new SMART goals based on insights.

## Organizing and Integrating

*Generating theory and informing practice*

- What inferences, explanations, or conclusions might we draw? (causation)
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The Collaborative  
Learning Cycle



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“Collaborative inquiry requires vulnerability to learn in public, be patient with process, and suspend self-interest to serve a larger purpose. Groups that embrace these challenges, invest energy in their own development, and put data in the center of their conversations produce significant learning gains for themselves and their students.”

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- Lipton & Wellman (2012, p.5-6)





# Daily Dose of Vitamin C

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Engage in daily practices (habits) that cultivate:

- Curiosity
- Creativity
- Collaboration

Now what?

Identifying and Navigating Data Roadblocks

