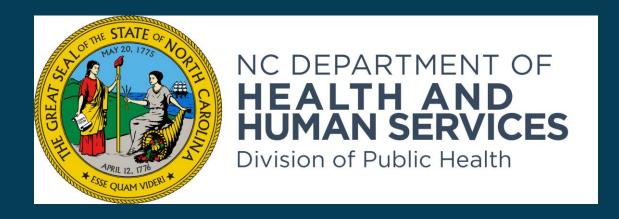


# LEVERAGING A SYSTEMS THINKING APPROACH FOR ACES AND SUICIDE PREVENTION IN A REMOTE ENVIRONMENT

Webinar September 28, 2020





The ASPIRE Project acknowledges grant support from the Centers for Disease Control and Prevention (CDC) through CDC-RFA-CE16-1602SUPCOVID2020, a supplement to the Core State Violence and Injury Prevention Program awarded to the NC Division of Public Health, Injury and Violence Prevention Branch.

## Funders

# ASPIRE IN A REMOTE ENVIRONMENT

#### **Project Activities**

- Webinar Series
- CollaborativeLearning Institute

#### **Project Materials**

- 3 Handouts
- SupplementPacket

### Evaluation



50 participants who respond to the webinar evaluation will be chosen at random to each receive a \$10 gift card!



Describe the Shared Risk and Protective Factor approach



Describe a process for prioritizing

Shared Risk and Protective

Factors based on stakeholder priorities



Describe a method that can be used to examine the roles, relationships, and resources available to leverage within a system



Demonstrate principles for effectively facilitating systems thinking application in a remote environment

## LEARNING OBJECTIVES



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Associate Professor,
Health Policy and Management,
University of North Carolina at
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VICHI JAGANNATHAN, MBA

Co-Founder,
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BECKY NAUMANN, PHD

Assistant Professor,
Epidemiology &
Injury Prevention Research Center,
University of North Carolina at
Chapel HIII



JACKIE CAMPBELL, MS

Alliance Director, ROC the Future

#### Presenters

## How familiar are you with the concept of systems thinking?

- Very familiar
- Sort of familiar
- I've heard of the term, but have never learned about it
- Not at all

## How open would you be to organizing an IVP initiative around a Shared Risk and Protective Factor approach?

- Very likely
- Likely
- Not Likely
- I would like to, but there is a barrier that would prevent me from doing so

## Poll Questions



## SHARED RISK AND PROTECTIVE FACTORS (SRPF)

## WHAT DO WE MEAN BY "SHARED RISK AND PROTECTIVE FACTORS"?

## WHY USE SRPF?

Once we better understand connections between multiple forms of violence, we can:

#### **PREVENT**

multiple forms of violence simultaneosly

#### **DEVELOP**

new partnerships

#### LEVERAGE

resources & funding streams

#### CONSIDER

a larger pool of prevention strategies

#### Shared Risk Factors & Across suicide & ACEs

Factor		Suicide	Child Maltreatment	Intimate Partner Violence	Sexual Violence	Teen Dating Violence	Youth Violence	Bullying
Society	Societal income inequality		X	X			X	X
ity	Diminished economic opportunities / high unemployment rates	×	X	X	X		×	
Community	Neighborhood poverty	X	X	X	X		X	
Com	Poor neighborhood support & cohesion	X	X	X		X	X	
	Barriers to healthcare	X						
ationship	Social isolation & lack of social support	×	×	×		X	×	×
ions	Economic stress	×	X	X			×	
Relat	Family conflict		×	×	×	×	×	×
~	Financial & work stress	×						
_	Witnessing violence	Χ	X	Χ	Χ	Χ	Χ	X
iduc	History of violent victimization	×	X	×	X	×	×	×
Individual	Psychological / mental health problems	×	×	×		X	×	
	Substance use	×	×	×	×	X	X	X

<sup>\*</sup> Red indicates factors that are highlighted throughout the webinar

## Shared Protective Factors & ACES ACES

	Factor	Suicide	Child Maltreatment	Intimate Partner Violence	Sexual Violence	Teen Dating Violence	Youth Violence	Bullying
Society	Strong health, educational, economic, & social policy/law	X	X	X	X			
	Gender equitable norms		X	Χ	X	Χ	Χ	Χ
Community	Community support & connectedness	X	X	Χ	X		X	
	Coordination of resources & services among community agencies	X	X	X				
	Access to mental health & substance abuse services	Χ	X					
	High quality childcare, primary care, & afterschool programs		Χ	Χ	X	Χ	Χ	Χ
Relationship	Family support & connectedness	Χ	Χ			X	Χ	X
	Connection/commitment to school	Χ			X	X	Χ	X
	Strong parent-child relationships	Χ	Χ	Χ	X	X	Χ	X
	Connection to a caring adult	Χ				Χ	X	
	Association with pro-social peers					X	X	X
dividual	Strong non-violent social problem-solving skills	X	X	X	X	X	X	X

<sup>\*</sup> Red indicates factors that are highlighted throughout the webinar

# DEFINING "SYSTEM" AND "SYSTEMS THINKING" & UNDERSTANDING THE VALUE OF A SYSTEMS PERSPECTIVE

## WHAT IS A SYSTEM?









A collection of parts that interact with each other to form an interdependent whole

## A system is...





A set of interconnected components



with a definable boundary (open or closed)



that interact



by accepting inputs, collectively, and producing outputs/outcomes



through a transformation process

Systems can create hard problems. They can be overwhelming, wicked, and messy.

#### **Wicked Problems**

Problem in which stakeholders do not agree on what the problem is, or even if there is a problem – threatening collective impact –Vennix, 1999

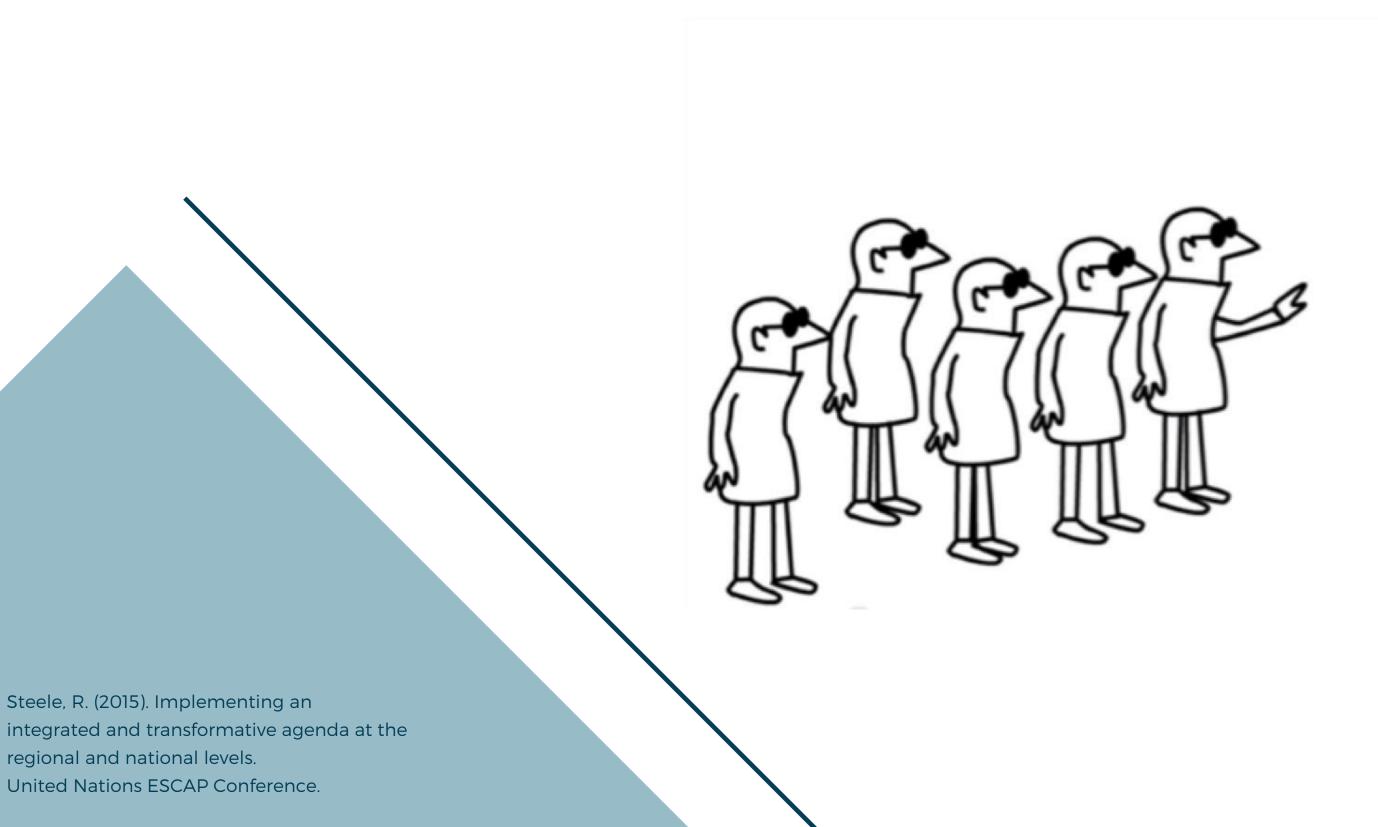
#### **Messy Problems**

"actually consist of multiple smaller problems that cannot be solved independently, and which often involve 'socio-political' or 'moral-spiritual' issues"

-Gary and Gill, 2009

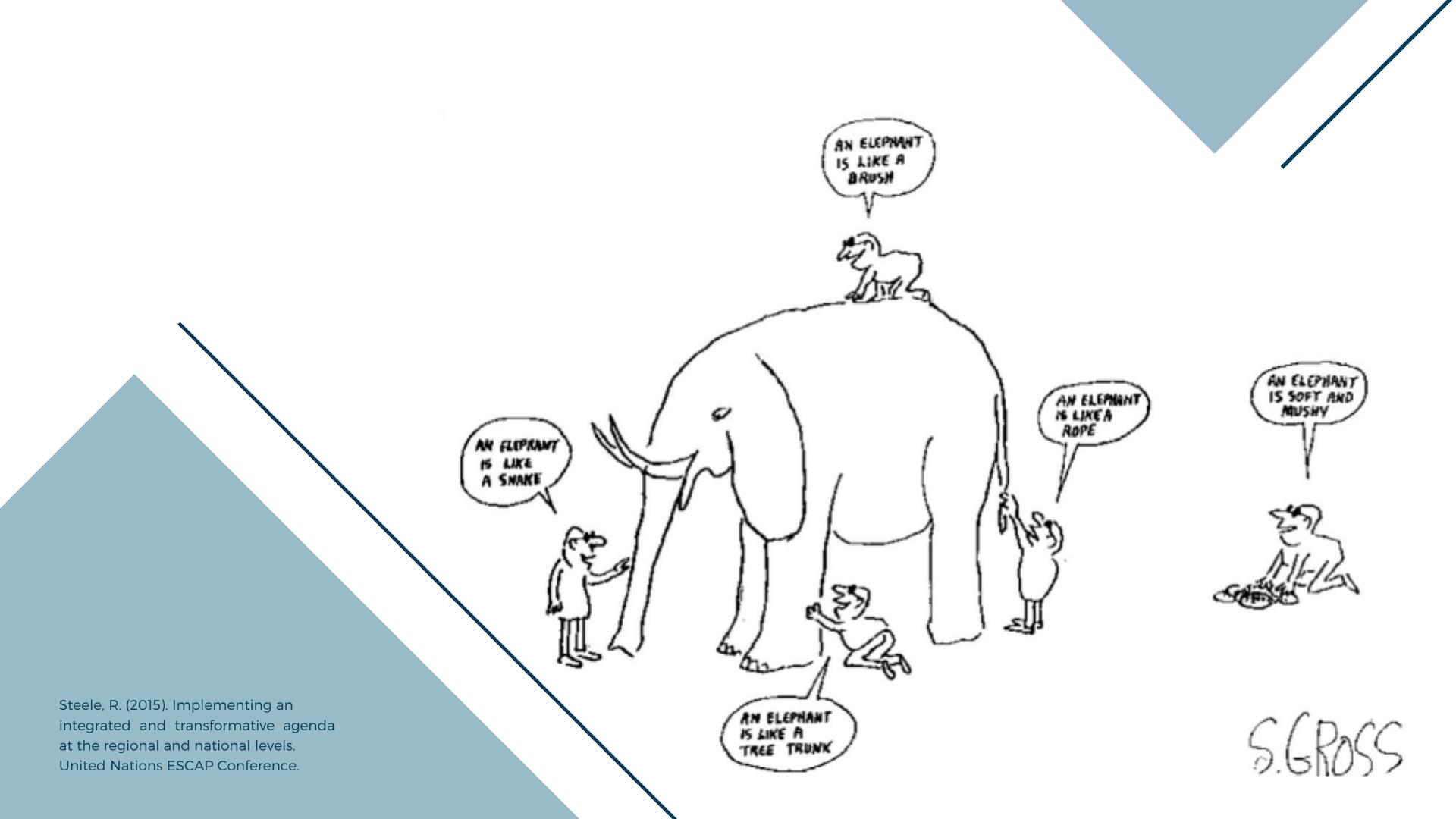
"Systems thinking is a discipline for <u>seeing wholes</u>. It is a framework for seeing <u>interrelationships</u> rather than things, for seeing <u>patterns of change</u> rather than static 'snapshots'.... Today systems thinking is needed more than ever because we are becoming overwhelmed by complexity. Perhaps for the first time in history, humankind has the capacity to create <u>far more information</u> than anyone can absorb, to foster <u>far greater interdependency</u> than anyone can manage, and to <u>accelerate change far faster</u> than anyone's ability to keep pace."

PETER SENGE,
THE FIFTH DISCIPLINE





integrated and transformative agenda at the regional and national levels.



## Complex Systems as Icebergs

#### **Events**

## What happened?

- Headlines in a newspaper
- Urgent emails
- Fires to put out

#### **Events**

**Patterns of Events** 

## What's been happening?

- Past events over time
- Anticipated future events
- By race? By geography?By...

**Events** 

**Patterns of Events** 

**Systemic Structures** 

## What structures generate the patterns of events?

- Roles and responsibilities
- Rules, norms, policies, incentives
- Relationships between the parts
- Dynamics reinforcing/resisting change

**Events** 

**Patterns of Events** 

**Systemic Structures** 

**Mental Models** 

## What drives individuals' actions?

- Vary based on experience, training
- Our simplified rules about how the world works
- Reflect norms, biases, gaps in experiences

# What systems thinking is all about...

"The system is broken!"

NO! "Every system is perfectly designed to achieve exactly the results it gets." - Don Berwick

The system is producing exactly what it is designed to produce. Let's uncover and re-wire the system's structure to get the outcomes we want!

## Supporting trauma-informed and resilient communities

#### **Our Mission:**

Unjust systems cause trauma. We support people's healing process by
educating, reshaping systemic practices, and fostering deep-rooted connections.
We know people are not to blame for the trauma and stress that impacts them.
Resilience is an inner strength in all humans, regardless of background, and we as
people are wired for connection and healing.

opportunity

#### **Our Vision:**

• Investing in community leaders and public agencies, we envision reimagined worlds of healing and justice: healthier, safer, and self-determined futures for current and future generations in rural communities. We are based in Edgecombe County, North Carolina; we hope to share what we learn with other areas in the rural South.



#### **Our Engagement Processes**

- 10+ community meetings
- 100+ interviews & workshops



Law Enforcement



Local Government





K-12 Education

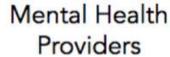


Community College











Hospital











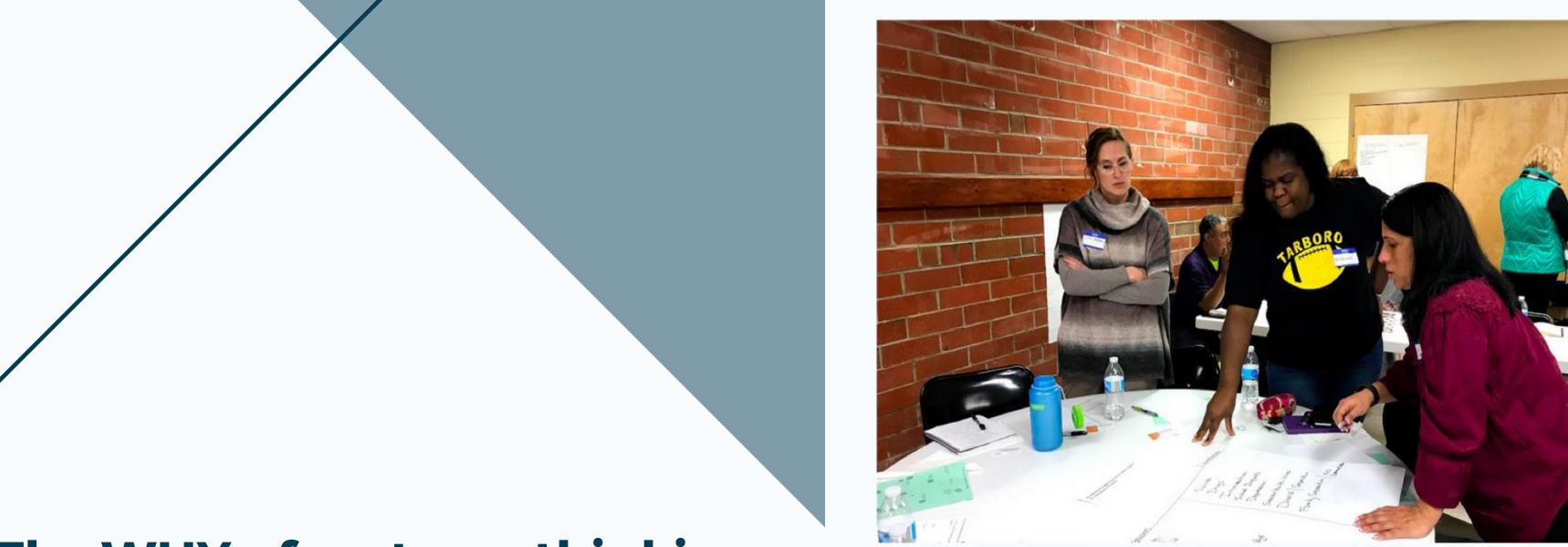
## The vision is born

A cross-sector collaboration that improves rates of many interrelated and intergenerational health and social problems in East Tarboro by investing in the people most at risk and reducing and preventing the root cause of these problems: Adverse Childhood Experiences (ACEs).

### **Framing Question:**

What forces account for the current levels of trauma/ACES in East Tarboro?



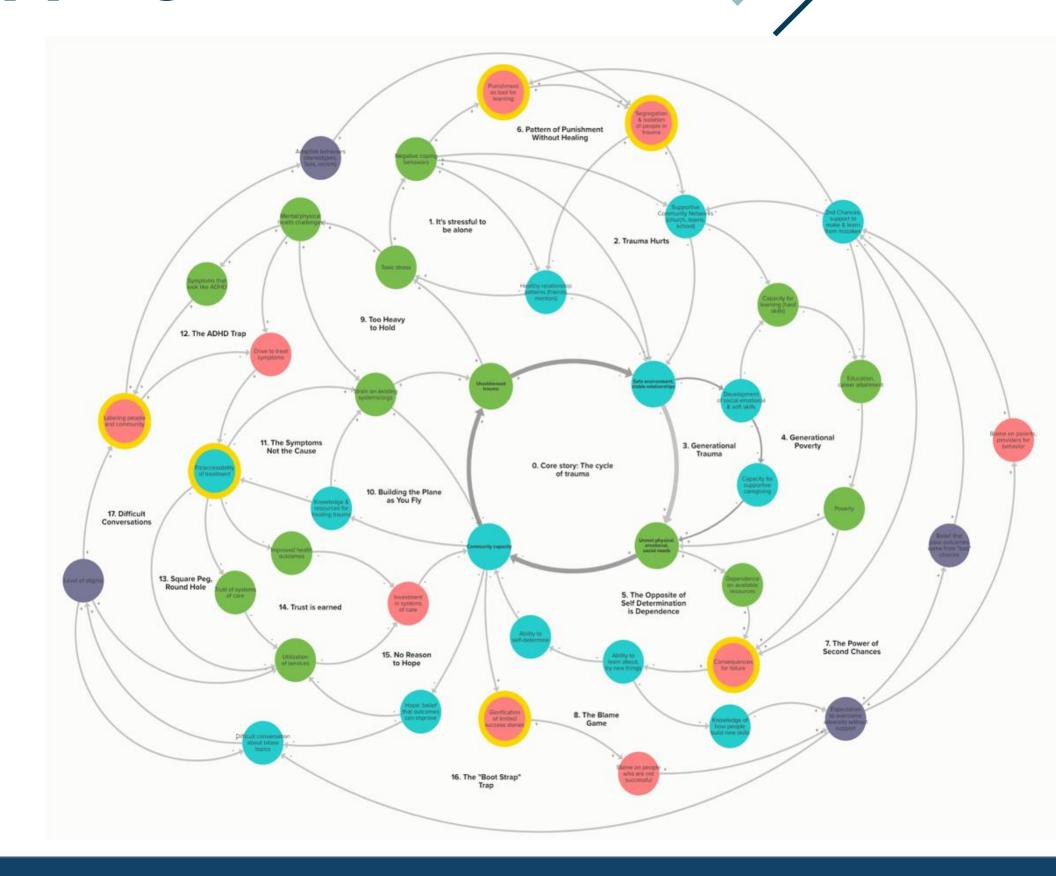


The WHY of systems thinking: Remove individual blame, move to shared opportunity



### **Themes for Systems Mapping**

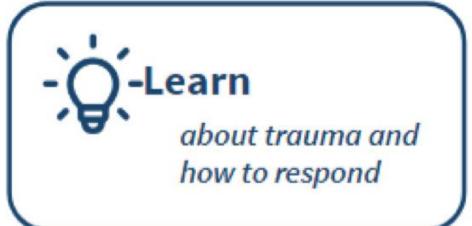
- Generational trauma & generational poverty stem from underdeveloped "soft skills"
- Coping behaviors lead to punishment & isolation from healthy relationships
- Systems of care misdiagnose and then apply poor fit treatments
- No hope = blame, few 2nd chances, less difficult conversations





### Strategy for Becoming Trauma-Informed

Long Term: people who have experienced trauma and have healed are best positioned to provide healing for others



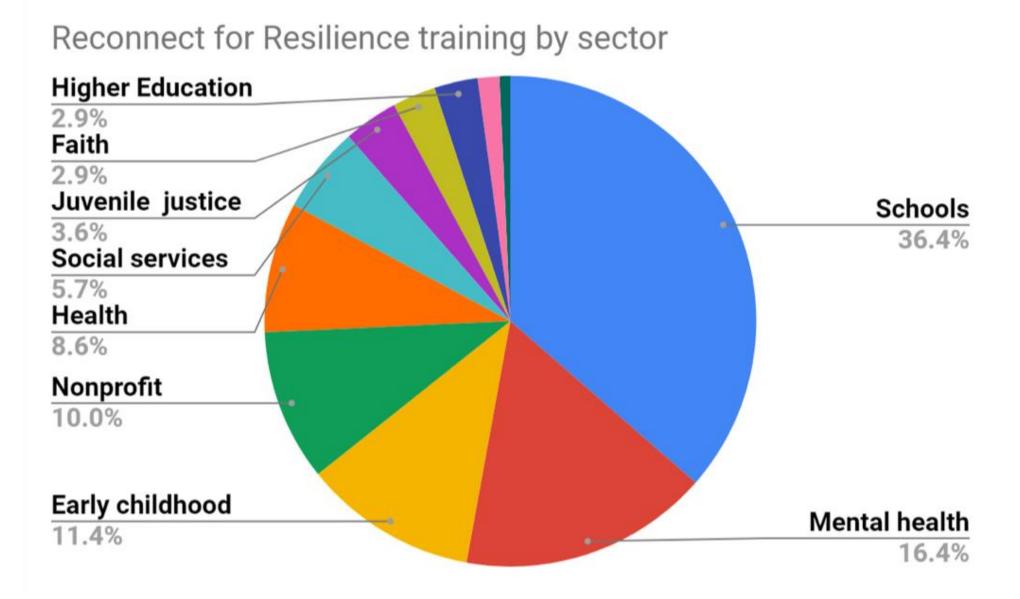






#### **Cross-sector impact**

- 120+ workshops and trainings
- 4500+ people









## Biofeedback breathing in a middle school & county jail

- Students who did biofeedback breathing saw their anxiety symptoms reduce by 57%
- 100% of students said their ability to calm down has improved since beginning biofeedback and want to continue the program





## Takeaways

- Systems mapping helps visualize a complex problem, and then find ways that individuals can have impact
- Engaging in the process is just as important as the outcome
- What people say and what they do often contradict we need tools and structures to draw out the truth
- Systems mapping removes blame and allows us to find shared truth and move forward together



## PRACTICAL SYSTEMS THINKING TOOLS

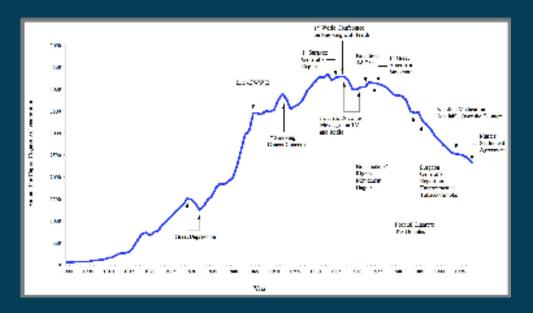
## Systems tools: Adding to our toolbox

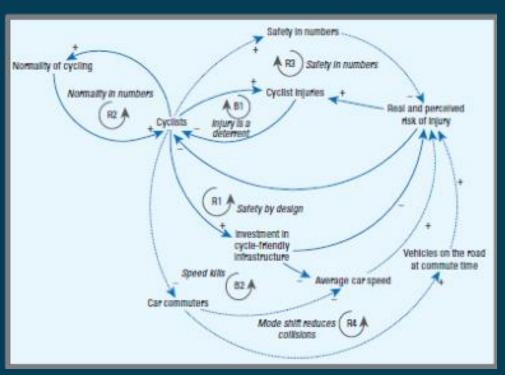
#### Qualitative

- 5 R's
- Causal loop diagramming
- Conversation map for priority and resource alignment
- System support mapping
- AcciMap

#### Quantitative

- System dynamics simulation (stock and flow simulation)
- Agent-based models & microsimulation
- Social network analysis
- Discrete event analysis







# The Five R's: Why do we do it?

- To understand the broad "system" around an area of work
- Efficient way to brainstorm as a group and describe key features of the system that will help:
  - define meaningful measures,
  - ensure engagement of all relevant stakeholders,
  - and design action that mindful of available resources, rules (constraints, norms, etc.), and key relationships

#### The Five R's: What is it?

A five-question framework used to guide individual brainstorming, idea synthesis, and group discussion. The questions uncover:

- the RESULTS/outcomes that matter
- the set of stakeholders or actors with a ROLE (affecting or affected by changes in these outcomes)
- the **RESOURCES** available to support change
- the RULES (formal and informal) that shape these roles, resources, and relationships
- the most critical **RELATIONSHIPS** between those with a role in the system that affects results/outcomes of interest

### The Five R's: How do we do it?

- Ask individuals to brainstorm (quickly) for each of the "R" questions
  - Can be done through a survey (google forms, Qualtrics, surveymonkey, etc) or on stickies in a live (or virtual!) meeting
  - TIP: Consider starting with "Results" to scope the project
- Sharing of individual responses can be done "live" or "offline"
  - Live Share one idea at a time while facilitators cluster themes
  - Offline Support team synthesizes individual responses and reports back to the group
  - TIP: Keep stakeholder language, but make it easy to see themes emerging within each "R"
  - TIP: Make sure any missing stakeholders (with a Role!) join/add their voice
- Discuss consolidated results- what is missing, prioritize results to focus on, identify/prioritize resources, relationships, rules to change
  - TIP: Make sure to keep good notes and update/build from early work!

### The Five R's: Key Strengths

- It's a simple framework (easy to describe)..... yet it generates rich and important conversation
- Can take as little as 1-2 hours
- Documentation can be readily reviewed and updated over time
- Used ~100 times on a variety of collaborative projects and recurring feedback very positive - "easy to use," "helped us scope our project,"
  - "uncovered rocks we wouldn't have turned over"

### PRACTICAL SYSTEMS THINKING TOOLS: CONVERSATION MAP FOR PRIORITY AND RESOURCE ALIGNMENT

### Conversation Map for Priority and Resource Alignment: What is it?

A mapping tool that allows people to see how they are embedded
within a larger system that includes SRPFs, illuminates less direct winwins between themselves and partners, and can help motivate action
and change.

 Can help organizers learn how to better approach different types of stakeholders when engaging and proposing a SRPF approach.

### Conversation Map for Priority and Resource Alignment: Why do we do it?

### We know there are several challenges stakeholders face in adopting a SRPF approach:

- Hard to engage a wide range of stakeholders unless stakeholders have a better understanding of why they should care
- Hard for any one stakeholder to know what is relevant to another partner/stakeholder
- SRPF action potential comes with collaboration. Alignment work is needed!
- Generating an understanding of connections between SRPFs and outcomes, and clearly communicating and displaying these, is imperative.

### Conversation Map for Priority and Resource Alignment: How we do it?

- Decide which SRPFs you want to work on in your community
- Identify potential partners and set up interviews
- Ask each partner to describe:
  - What they do about 3 of their most mission-critical objectives
  - What keeps them up at night up to 3 "pain points"
  - Connections or stories about how a risk or protective factor affects their work
  - Connections or stories about how their work could affect a risk or protective factor
  - Prioritize up to 3 connections going each way (SRPF ---> objectives or pain points AND objectives ---> SRPFs)
- Overlay partner maps, discuss the system of values and action potential, and use insights to support future engagement and investment

# Conversation Map for Priority and Resource Alignment: Key Strengths and Example

- Structured guide to help us understand:
  - What motivates partners to work with us
  - Doesn't require everyone to care about the same thing
  - Helps us learn to connect better in potentially powerful ways
- Our illustration of this tool was centered around several key SRPFs for suicide and ACEs

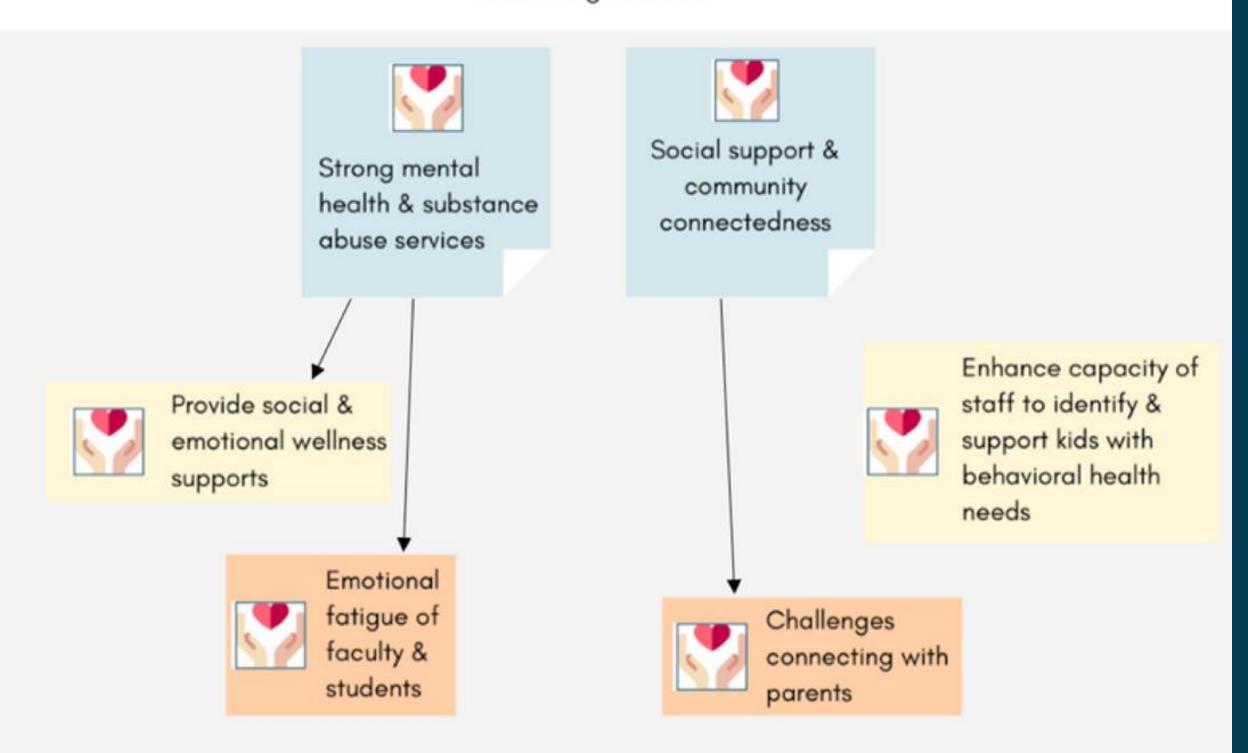
Social support & community connectedness

Strong mental health & substance abuse services Economic opportunity & Housing stability

#### Map each stakeholder's mission critical objectives and pain points.

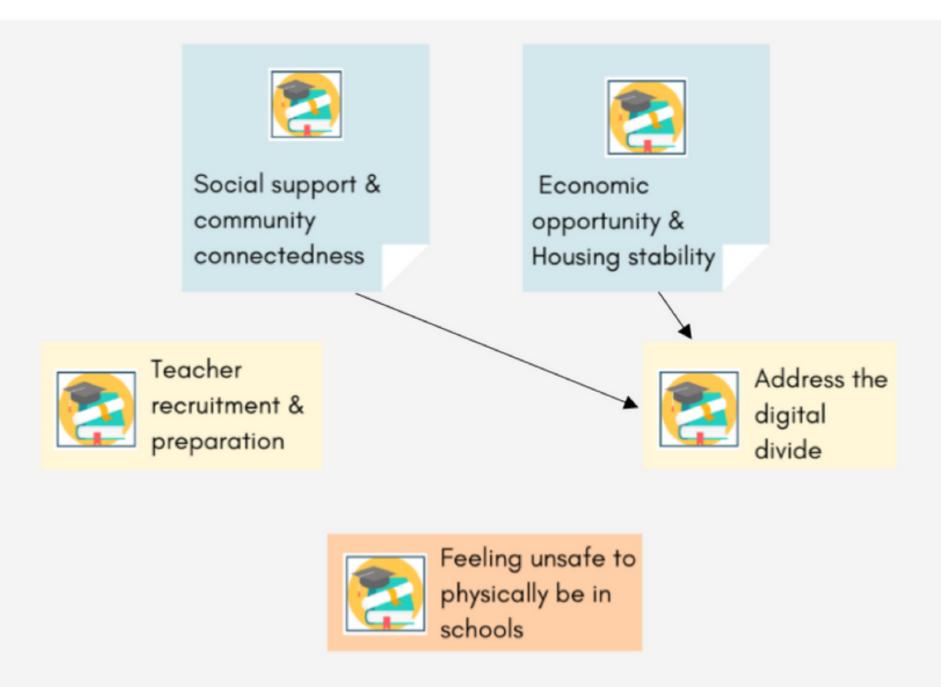


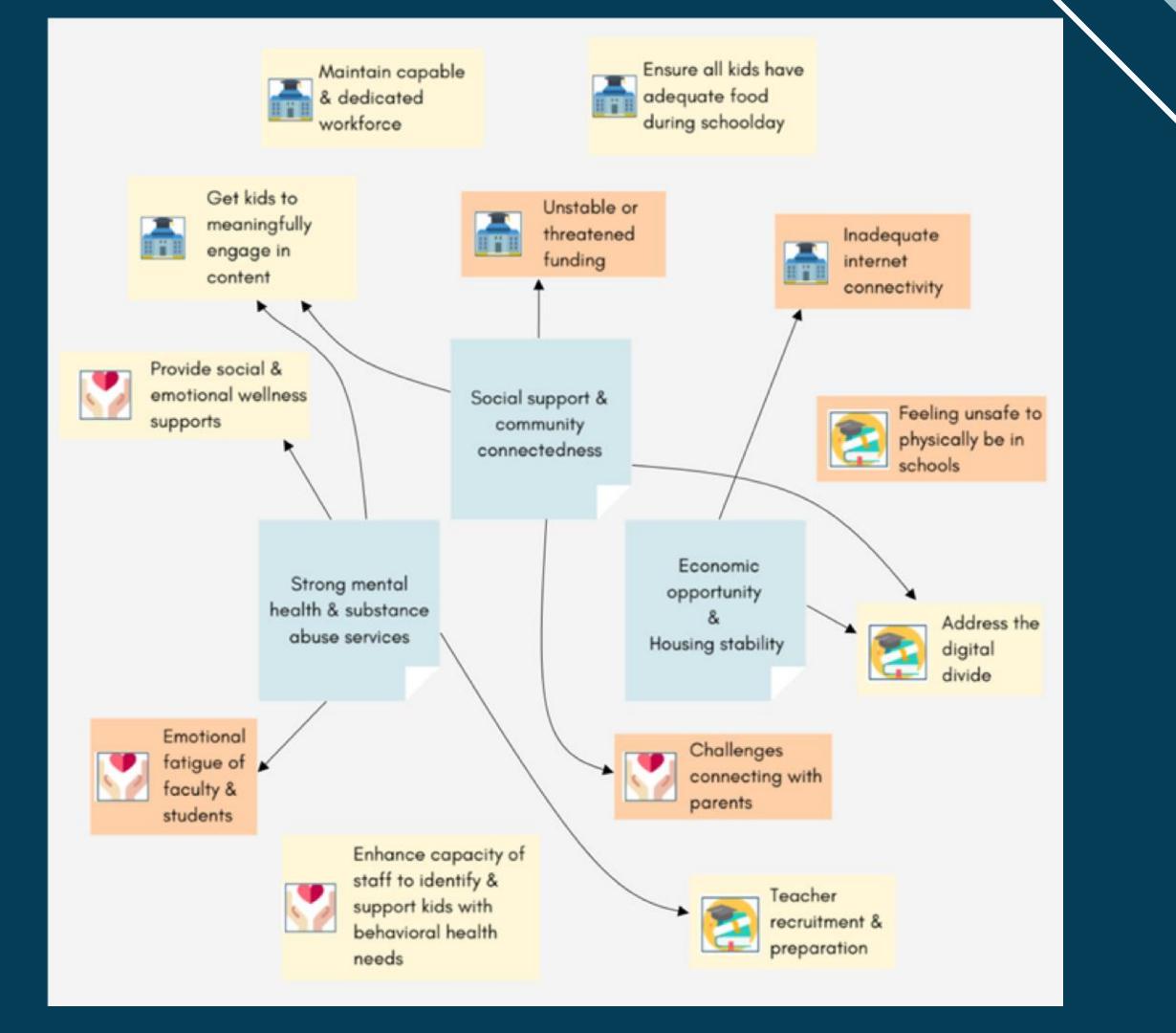
Mental health service organization

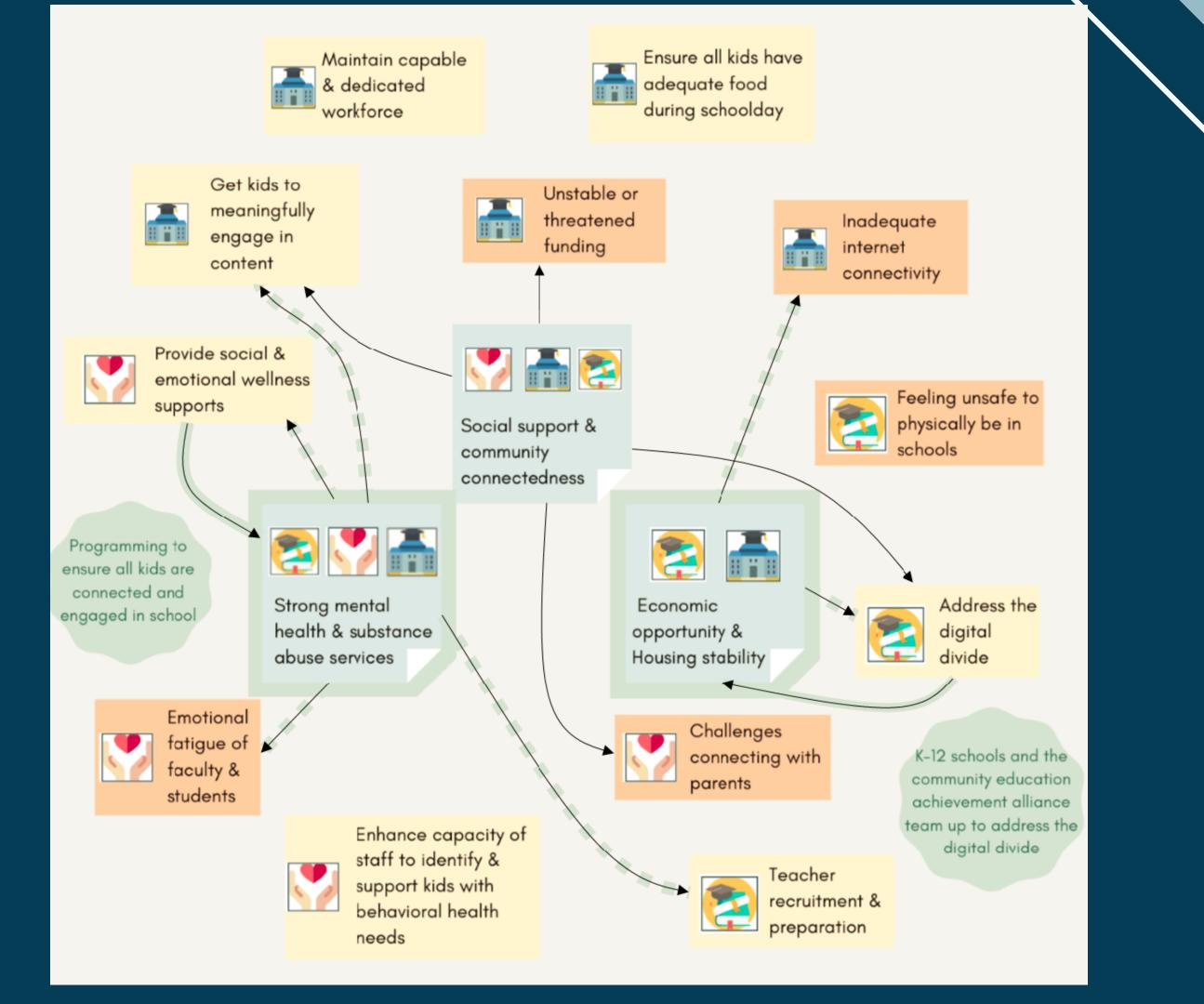


#### Map each stakeholder's mission critical objectives and pain points.









#### ROC the Future!

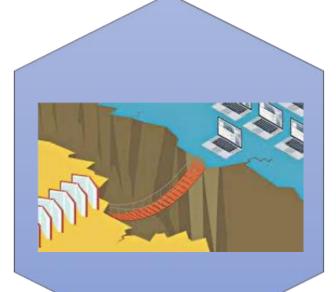
- Launched in 2011, Rochester's community-wide initiative to tackle improving academic outcomes for all children, from cradle to career
- One of 69 communities in the national STRIVE Together collective impact network, working to improve student outcomes
- Focus: School Readiness, Early Grade Literacy, and High School Graduation

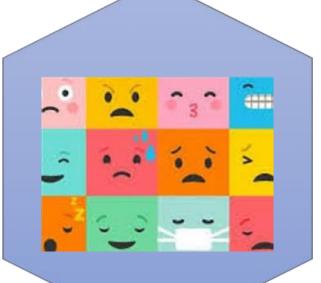




- ROC the Future objectives, pain points, relationships to shared risk and protective factors
- Systems thinking tools to support these conversations
  - Experience as an interviewee
  - Motivation as an interviewer
- Importance of and support for cross-sector collaboration
- Working in a dynamic system and need for iterative conversations and tools to support regular touch points and conversations

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### children's institute

STRENGTHENING SOCIAL AND EMOTIONAL HEALTH





 ROC the Future — objectives, pain points, relationships to shared risk and protective factors

- Systems thinking tools to support these conversations
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### Mitigating the Interplay of Culture and Context: Internal and External Factors

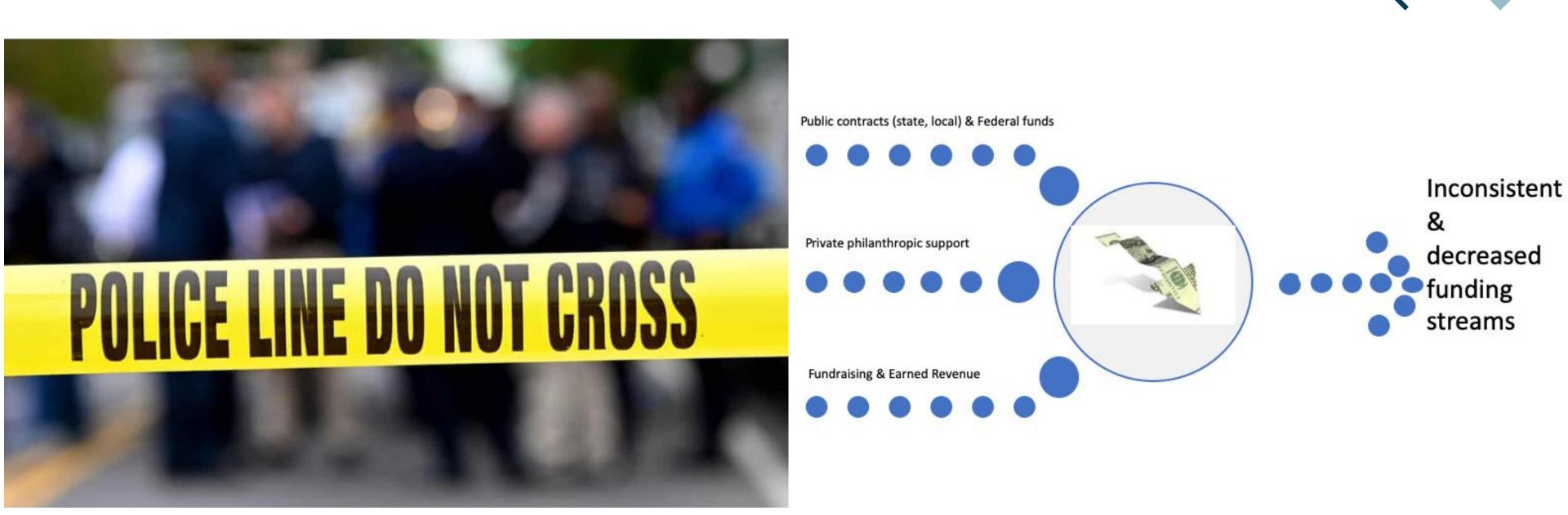


Image from https://www.theguardian.com/us-news/2020/sep/19/two-dead-mass-shooting-party-rochester-new-york

### Poll Question

Which of these software or tools are you using in remote, collaborative meetings?

- Jamboard
- Mural
- Miro
- Kumu
- Zoom Whiteboard
- Visio
- None of the above
- We do not use remote collaborative software









### Importance of Collaboration





Adults are autonomous and self-directed



Adults are goal-oriented



Adults bring knowledge and experience to each learning activity



Adults are problem-oriented and want to apply what they've learned



Adults need learning to be relevant and practical



Adults, as with all learners, should be shown respect

### ADULT LEARNING PRINCIPLES IN A REMOTE ENVIRONMENT

### Adult Learning Principles in a Remote Environment

We retain approximately: 10 percent of what we see; 30-40 percent of what we see and hear; and 90 percent of what we see, hear, and do.

- Visual: videos, slides, flip charts, readings
- Auditory: lectures, group discussions, informal conversations, brainstorms
- Kinesthetic: group mapping/ diagramming, writing/ note-taking, simulations, activities/ exercises

### Adult Learning Principles in a Remote Environment

TOOL

MURAL

MIRO

**JAMBOARD** 

ZOOM

KUMU

ADULT LEARNING APPROACH

VISUAL & KINESTHETIC

VISUAL & KINESTHETIC

VISUAL & KINESTHETIC

VISUAL, AUDITORY, & KINESTHETIC

VISUAL & KINESTHETIC

TOOL FUNCTIONALITY

Sticky notes, Flow charts, Diagrams, Frameworks, Drawings, etc

Sticky notes, Flow charts, Diagrams, Frameworks, Drawings, etc

Whiteboard with sticky notes, and ability to draw (flow charts, diagrams, frameworks)

Whiteboard, Breakout rooms

Systems thinking visualizations

COST

\$12-20/month

\$0/month for 3 canvas; \$8/month for unlimited canvas

> Included with GSuite - \$6/month

\$12-16/month

\$30+/month

#### Collaborative Learning Institute (CLI)

#### November 2020-April 2021

Free opportunity for multi-sector teams to gain hands on experience practically applying systems thinking tools to their work while receiving technical assistance from SMEs

#### **Eligibility Criteria**

- Team of 3-5 individuals
- Working in ACEs or Suicide prevention in some capacity
- Able to commit to entire 6-month program

- Applications close Oct 15<sup>th</sup> at 11:59pm
- Accepted teams notified by Oct 26th
- Kick Off Meeting: Nov 2nd
- Teams must be available for Session dates

Application and additional details available at https://remotepublichealth.org/aspire-project/collaborative-learning-institute/

#### Webinar Series

#### Webinar #2 - Coming Soon!

- The next ASPIRE Project webinar will be hosted in May 2021
- Part two will follow up from several points discussed during today's webinar and provide an update on best practices/lessons learned for implementation of these systems tools and utilizing them in a remote environment

# How open would you be to organize an IVP initiative around a Shared Risk and Protective Factor approach?

- Very likely
- Likely
- Not likely
- I would like to, but there is a barrier that would prevent me from doing so

### Poll Question



# WHAT BARRIERS OR CHALLENGES HAVE YOU FACED IN DOING YOUR WORK VIRTUALLY?

ENTER YOUR RESPONSE IN THE CHAT BOX





### Get in Touch

#### PRESENTERS

- Kristen Hassmiller-Lich: klich@unc.edu
- Vichi Jagannathan: vichi@email.unc.edu
- Becky Naumann: rnaumann@email.unc.edu
- Jackie Campbell: jackie@thechildrensagenda.org

#### ASPIRE PROJECT

- Belinda-Rose Young Project Director: belindayoung@unc.edu
- Siarra Scott Project Manager: siscott@email.unc.edu



#### Resources

#### **SYSTEMS THINKING RESOURCES**

- https://thesystemsthinker.com/
- Meadows DH. Thinking in systems: a primer. London; Sterling, VA: Earthscan, 2009.
- Sterman J. Learning from evidence in a complex world. Am J Public Health. 2006; 96(3): 505-514. doi: 10.2105/ajph.2005.066043.

#### **SRPF RESOURCES**

- Wilkins, N., Tsao, B., Hertz, M., Davis, R., Klevens, J. (2014). Connecting the Dots: An Overview of the Links Among Multiple Forms of Violence. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention Oakland, CA: Prevention Institute. Available:
   https://www.cdc.gov/violenceprevention/pdf/connecting\_the\_dots-a.pdf
- CDC Connecting the Dots online training: https://vetoviolence.cdc.gov/apps/connecting-the-dots/

#### ADDITIONAL RESOURCES IN ASPIRE PROJECT SUPPLEMENT