Creating a Culture of Resilience: Lessons Learned
Mobilizing Action for Resilient Communities (MARC) Grant Final Report
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Washington State Grant – Walla Walla's CRI

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Executive Summary

Community questions and research-based answers:

1. Past research showed that interventions by Walla Walla Community Resilience Initiative (CRI) organizations and Lincoln Alternative High school seemed to increase individual client/student resilience (1,2,3), so we asked: "What kinds of resilience need to be increased in order to impact the whole of the Walla Walla community?"
   Statewide results indicated that 'contextual' levels of resilience were more important than individual resilience in moderating the impact of ACEs community-wide (4,5):
   - adults helping each other (social cohesions and collective efficacy) and
   - youth getting support in four domains: parent/adult, peer, school and neighborhood.
2. CRI in Walla Walla has been providing NEAR science trainings for local organizations, in order for them to implement Trauma Informed Practices and work together to build resilience, and has encountered some obstacles and resistance, so we asked: "How can we be more effective at increasing resilience?"
   - Local Walla Walla research - focus groups (6), interviews (7) and staff/teacher surveys (8) showed bringing about effective change required not only new knowledge through trainings, but also shifts in insight (worldviews and mindsets), shifts in organizational structures (values and policies), and strategic practice with specific tools (9).
   - Documentation of community capacity development in Walla Walla suggests that previous scaffolding initiatives and partnerships have created new capacity to work together on targeted sectors to build a cultural 'contextual' resilience (10,11).

Actions taken in response to findings:

- New trainings on the KISS framework have been developed with Rick Griffin that include not only NEAR science (Knowledge), but also Insight, Strategies, and Structure.
- Capacity development strategies are now focused on learning about what works and how to work together better. Walla Walla Investors and the school district are now actively supporting such collaborative strategies, including:
  - Trainings for all public health staff, all district teachers, and many new partners
  - TIPs implementation at younger ages (grades K-5) and with all major caregivers
  - Funding for more empowering strategies in poorer-Hispanic neighborhoods
  - Better prospective pre-post measures of contextual resilience to show effects on desired outcomes, helping overcome resistance and diffuse innovations.

This report covers the methods and results of the research undertaken for Walla Walla, how this research originated from community questions, and how the results were communicated back and led to new learning and actions taken.

An Abstract of Major Research Findings: Questions, Research Methods, Results, Implications and Limitations

Questions:

1. What are the major aspects of community-wide Resilience, across all 118 communities in the State of Washington?
2. What effects does Resilience have on levels of health, education/work, and coping behaviors for both adults and youth across these communities?
3. Does Resilience moderate the impact of different levels of ACEs in these communities?

Research Methods:
A data set was constructed including summary measures of community-wide levels of Resilience, ACEs, physical and mental health, school and work performance, coping behaviors, poverty and race/ethnicity for 118 communities in Washington State. The data set included information for the period 2009-12 calculated from 27,000 adults (18-64 year-olds, BRFSS) survey respondents, 35,000 youth (10th grade HYS) respondents and state agency archival data. Communities were defined as those sharing the same school boundaries, both in rural and urban areas, as reported in DSHS publications since 1997.

Factor analyses were conducted of various individual and contextual Resilience components in order to calculate common underlying measures of Resilience across the communities. Discriminant analyses provided information on how higher community capacity levels were associated with higher levels of Resilience.
Regression analyses were conducted statistically assessing the significance and magnitude of the effects of common underlying dimensions of Resilience on levels of health, education/work, and coping behaviors, controlling for the effects of poverty and race/ethnicity.

Major Results (5):
The factor analyses showed that contextual resilience factors were more strongly related to community-wide Resilience than percentages of people with higher individual resilience:

- Among adults, greater social cohesion and collective efficacy – extent of mutual/reciprocal help - was the major dimension of resilience, NOT the greater percentage of adults with higher individual resilience.
- Among youth, greater levels of support in four social domains - parents/adult caregivers, peers, schools and neighborhoods – along with greater extent of mutual/reciprocal help among adults were the major dimensions of resilience, NOT the greater percentage of youth with higher individual resilience.

Higher levels of contextual resilience discriminated communities that had achieved higher community capacity, independent of community levels of ACEs, poverty and race/ethnicity.

Contextual resilience had significant, large effects on community levels of physical and mental health, education and work, and coping behaviors, independent of community levels of ACEs, poverty and race/ethnicity. Moderation effects of Resilience on ACE impacts were substantial.

Implications:
Resilience may not be a stable, unique personality trait, but may be mainly created and maintained by social interactions. So, increasing rates of contextual resilience, through community capacity development, may be the most effective way of increasing community-wide well-being and moderating the impact of ACEs in this and future generations.
In other words, strategies that improve both a community-wide culture of mutual help among adults and also social-emotional supports across various social domains among youth may be the most effective way to reduce the impact of ACEs.
Building contextual resilience may require a shift beyond simply providing more trauma informed care services to individuals with greater toxic stress, to strategies where local community organizations, working together in a collective impact way, empower and support all adults and youth.

Limitations:
This research still does not provide evidence of HOW community-wide resilience can be increased over time.

Question:
How does increasing community capacity lead to increased community-wide resilience, so that communities with higher levels of capacity also have higher levels of resilience?

Research methods:
A Walla Walla case study (11) of the history of community capacity development included:

- Recruitment of a Whitman College student in ethnography to do the case study
- Scheduling of regular consulting time to design the structure of the case study
- Review of historical documents
- Interviews of key community leaders, with transcriptions of the recorded interviews
- Description of activities at different levels of community capacity
- Documentation of how higher levels of capacity were built – scaffolded on prior levels.

Results:
A 56-page narrative of how community capacity was built:

1. Starting from where community energy and common focus existed,
2. Recruiting community leaders from different sectors,
3. Implementing, collaboratively, prevention interventions that could reinforce impacts, and

4. Learning what worked and what challenges remained, so that new focus, leaders and interventions could be developed in the next phase.

Implications:
Resilience levels in the community increased at each phase of community capacity development, starting from creating areas of greater safety and mutual support among some organizations and in some community sectors, then diffusing and expanding progressively to other organizations and other sectors.

Current challenges in Walla Walla involve:
- Overcoming worldview/mindset obstacles to implementing trauma informed practices
- Working more collaboratively, across sectors, schools-neighborhoods, to maximize collective impact and increase mutual-help, contextually resilient cultures.

Questions:
1. What are the major components of Trauma Informed Practices, TIPs, (as implemented in Walla Walla)?
2. What other factors lead to greater implementation of trauma informed practices other than more knowledge derived from NEAR science trainings?
3. How important are these other factors?

Research methods and Findings:
Qualitative:
- Focus groups of staff and supervisors from various CRI organizations were asked what TIPs they had implemented, what challenges they had experienced and what their future plans were. Their answers provided the following information on what common TIPs had been implemented by most organizations (6):
    - safety/trusting relationships,
    - self-regulation, mastery skills leading to greater optimism/hope
    - self-care and mutual support among caregivers
- In depth interviews of key community leaders on what experiences had led to their changing practices provided the following set of common steps (7):
    - Exposure to consequences of toxic stress from experiences and stories S – Strategy – having a new set of tools to choose from
    - Compassion
    - Empathy
    - Mindset/worldview changes from self-reflection
    - Reinforced by new knowledge of scientific evidence
    - Reinforced by changes in organizational policies

Quantitative:
- Survey of 210 staff and supervisors (8) was analyzed to statistically assess the impact of:
    - K – Knowledge from trainings, readings, conferences etc.
    - I – Insight – shifts in mindsets from experiences, stories, empathy

- S – Strategy – having a new set of tools to choose from
- S – Structure of organizations, including values and policies

Major findings (9):

The combined impact of all four KISS factors explained statistically a large portion of the variance in the degree of implementation of TIPs across organizations: almost two thirds of the variance in implementation was explained by the four KISS factors (multiple R= .77).
Each of the four KISS factors had similar independent effects, one fourth for each factor.

Implications:
Greater Knowledge due to trainings and other exposure to the scientific findings of the impact of toxic stress is not sufficient to change behavior. Exposure to stories and empathy are equally important to change mind-sets that lead to changes in behavior. These are greatly facilitated by practice with new tools to build resilience, and by support from organizations where one works.
Diffusion of new practices may be greatly facilitated by 'cultural' and 'organizational' changes -- collaborative, collective efforts to increase resilience.

Question for future research:
What increases in community-wide resilience can be achieved by new collaborative efforts?

Design for prospective research study in Walla Walla:
A natural experiment is starting in Walla Walla, targeting young children (K-5), their parents and neighbors, with the aim of increasing contextual resilience, with both youth and adult supports. The partners in this effort are: school teachers, community organizers, CRI trainers and non-profit community organizations.
These partners are ready to work together due to past scaffolded efforts:

- New school district efforts to expand resilience building district-wide, starting in three elementary schools (K-5)
- On-going community organizing efforts in neighborhoods in Walla Walla (C2C, Commitment to Community), supported by Sherwood Trust, a local foundation
- CRI developments of new training modules involving all four KISS factors, to help shift mind-sets, implement TIPs and increase resilience and
- Experience in implementing Trauma-Informed Practices in social-health organizations like mentoring (Friends) and counseling (The Health Center) among others.

The proposed research design (12) includes:

- pre-post and comparison group measures in a prospective 2-3 year period.

Measures include:

- Individual and contextual Resilience scales for children developed by Machelle Madsen
- Social cohesion and collective efficacy measures developed by Michael Sampson in Chicago and modified recently in the Miami neighborhoods study.

This study promises to meet the diffusion of innovation needs of the school district and CRI organizations and to show how organizations can work together better in the future.

The Formative Evaluation Process - the scaffolded/collaborative ways questions were asked, answers were sought and shared, and actions were taken that generated new questions

This section presents details concerning the process of the formative evaluation in the past two years in Walla Walla. This involves describing four steps of the process for each evaluation:

1. What prompted the research question to be addressed by the research/evaluation?
2. How was the research/evaluation conducted?
3. How were the results communicated back to those asking the questions?
4. What action was taken in response to the new findings?
5. How did the resulting actions and learning lead to a new question?

It is useful to describe this process since it is part of the cycle of community capacity development, increasing the capacity for learning and helping people, organizations, and communities become more effective.

Question: What is resilience, specifically 'contextual' resilience or the 'culture' of resilience?

Question origins:
In Walla Walla, this question emerged mainly from discussions among Community Resilience Initiative (CRI) partner organizations and particularly from the results of efforts to increase resilience among students at the alternative Lincoln High school. Here values, school policies, and reinforcing sets of relationships among teachers and students had changed in order to support students who had experienced many Adverse Childhood Experiences (ACEs) so that they could become more resilient and improve their school performance. This culture change was mainly limited to the school environment. After leaving Lincoln High, students were not necessarily supported in new cultural domains, in post graduate institutions, in new neighborhoods, and among new peers. The question posed was whether resilience was mainly an individual personality trait that could be maintained in different challenging contexts or whether resilience was the result of multiple, social supportive interactions in different domains, in the culture of the community?

This question had often been asked by other communities in Washington State who had been organized as 42 Health and Safety Community Networks, funded by the state's Family Policy Council, including Whatcom, the other MARC community in the state. In response to this question, new state-specific research survey questions had been added to the BRFSS in 2009-12, funded by the Gates Foundation. However, no database construction or systematic analysis was conducted after the Family Policy Council was defunded in 2012 due to state fiscal crises.

The research/evaluation:
The database was constructed by various partners, who provided complementary skills:

1. Laura Porter, ACE Interface partner, who as Director of The Family Policy Council, had started introducing measures of both individual and contextual resilience in BRFSS

2. Ann Reeves, an epidemiologist and SAS programmer, who constructed the summary measures for the set of 118 communities in Washington State and compiled the database dictionary
3. Curtis Mack, Geographical Information System expert, who used boundary files to connect school district and zip-code geographies, in order to merge information for the same communities from student surveys (HYS), adult surveys (BRFSS) and different official state agencies – social welfare-health-education and criminal agencies
4. Dario Longhi and Marsha Brown, partners in Participatory Research Consulting, research experts in assessing social/health service and educational outcomes who helped design the various summary measures.

The database was finalized and deposited for different types of analysis at the University of Washington.

- The individual-level analyses were mainly done by a team of researchers headed by Paula Nurius, specializing in prevention in the UW School of Social Work. Two papers were published in peer reviewed journals, providing empirical statistical evidence of the effects of individual resilience in moderating the impact of ACEs on physical and mental health among adults (13,14).
- The community-based analyses were conducted in SPSS mainly by Dario Longhi, in collaboration with Teri Barila, head of the Community Resilience Initiative in Walla Walla, and Suzette Fromm Reed, director of the PhD Community Psychology program at National Louis University, and with Marsha Brown, formerly at the Evans School of Public Affairs at the UW and at South Seattle College. A paper, written and edited by the authors, is in preparation for submission to the American Journal of Community Psychology (AJCP). Although the research analysis and writing were not funded by the MARC grant, they were based on analyses made possible by MARC funding (15).

Communication of research results (diffusion of results to community organizers):

The main findings were shared in 2016 with leaders of the MARC grantee communities of Walla Walla and Whatcom, and with ACE Private Public Initiative (APPI) community representative Kathy Adams and Laura Porter.
Kathy Adams then invited 30 community organizers from around the state to attend a 'community of practice' meeting in January 2017, where Laura Porter shared the new research results on the dimensions of 'contextual resilience' that had such large moderating, community-wide, effects on the impact of ACEs. This meeting occasioned further communications and later more in-depth consulting with two communities in the state of Washington, Kitsap and Cowlitz.

The new results that identified the important role of contextual resilience, instead of individual resilience, in impacting community wide levels of health, education/work and coping behaviors, were presented at the Midwest Community Psychology conference in Chicago and at the national American Psychology Association conference in Denver in the same year, 2016. The audiences were mainly composed of community psychologists/local organizers from the Midwest and from across the country.

Laura Porter requested two examples of the major findings that she could incorporate into the NEAR science trainings she was conducting across the nation, trainings that included presentation of the dimensions of resilience. Two graphic examples of moderating effects of resilience were created for this purpose, one effecting levels of serious depression among adults, one effecting levels of risk in failing school among youth (Figures 1,2).

A power-point set of slides of the main results with a logic model was made for more general audiences. It was presented to CRI and to the INVESTORS in Walla Walla this past Fall, 2017 (Figure 3).

Actions taken in response:
Results provided impetus for further community capacity development, higher levels of which were shown to be associated with higher levels of contextual resilience. While children were the focus of past interventions in Walla Walla, and the assumption was that trauma-informed action led to increased individual resilience, now focus needed to be on changing values, mindsets, organizational policies in order to support a cultural change in different social domains to build 'contextual' resilience. This meant developing new strategies and initiatives for working together, in collective impact ways, among both adults in neighborhoods and among younger children.

Three new questions:

1. How did community capacity development evolve in the past so that this knowledge could guide further development and increase contextual resilience? Could the scaffolding principle of past development guide Walla Walla into new phases of development?
2. Could mindset/worldviews of the old culture and organizational barriers be overcome to implement trauma informed practices?
3. How could the Walla Walla community work together on innovative strategies?

The research/evaluation on Question 1 - community capacity development (10):
A top-level Whitman college student, an ethnographer, Haley Case, was tasked to reconstruct the phases of community capacity development over the past 20 years. This needed to be accomplished in the most unbiased way by:

- reading past historical documents of prevention efforts
- interviewing key leaders describing their past efforts, their thinking and achievements

Periodic, monthly, supervision of the student's work and progress was shared by

- a Whitman College professor, who could guide the student's research,
- Teri Barila, who could identify key historical phases and informants, and
- Dario Longhi and Marsha Brown, who could provide Haley with the theoretical background of the definitions and phases in the theory of community capacity development from Geof Morgan's dissertation and papers presented at conferences together with community psychologist, Paul Flaspholer at Miami University in Ohio.

In depth interviews of key Walla Walla leaders were recorded and transcribed.
The historical development of the various phases was narrated with quotes of recollections from community leaders.

Communication of research results on Question 1 -- capacity development
Haley presented a preliminary account of her major findings at a CRI meeting in the Spring of 2017, while in the last stages of completing her project (Figure 4).
She wrote a 56-page paper, available on Walla Walla's CRI website in Summer 2017 (7). The findings were then discussed by Walla Walla's new INVESTORS group who started acting as the strategic community prevention committee for Walla Walla, taking on some tasks of the Health and Safety Community Network that had been supported by the state-wide Family Policy Council.

Actions taken on Question 1 -- capacity development:
A new School District superintendent was hired that understood the importance of school culture change to increase resilience and further the work done by pioneer efforts by Lincoln High School. A new strategic plan was developed by the school district including supporting social emotional learning and building resilience.
Pre-school Head Start Trauma Smart programs were started in Walla Walla.

The research on Question 2-- factors that lead to implementation of trauma informed practices:

Before different organizations can work together to increase contextual resilience, they need to demonstrate that they have transformed their organizations and staff to implement trauma informed practices (TIPs).

CRI had developed a set of trainings to accomplish this with various old and new CRI member organizations. So, it became important to research:

1. what trauma informed practices had been implemented,
2. the degree to which this training had been effective, and
3. what factors could make for easier implementation of TIPs, overcoming possible barriers.

A set of focus group sessions with 11 different organizations were conducted to assess what common trauma-informed practices had been implemented, including those at Lincoln High.

Focus group findings (6) included the following:

- A set of common practices were found, independently developed by different organizations in different social, health, education and rehabilitative service sectors
- Two common challenges had been confronted by most organizations:
    - Implementation required changes in worldviews/mindsets that some staff had difficulty accomplishing

- Implementations were facilitated by changes in organizational values/policies and required supporting more flexibly staff's self-care and mutual care.

In-depth interviews (7) were conducted by a top-level Whitman College student, Jennifer Gruenberg, with some key community leaders in order to discover possible common steps to overcome challenges to worldview/mindset change.

Interview findings included steps involving:

- Experiences with individual life struggles dealing with toxic trauma
- Compassion and empathy enabling staff to 'put themselves in their shoes'
- Training on the neurological brain science of the effects of toxic trauma

The qualitative findings from the focus groups and intensive interviews enabled the construction of a set of questions to be included in a survey of CRI organizations staff and supervisors. 219 people were surveyed in the Spring of 2107, representing 19 different organizations in Walla Walla, that had requested NEAR science trainings from Teri Barila.

The survey included both quantitative questions asking for Likert-scale answers, and qualitative open-ended questions asking for respondents to describe their experiences, in their own words. The questions covered four factors:

1. trainings and knowledge of NEAR science,
2. familiarity of ACE experiences, which could affect mindsets and worldviews,
3. support from organizational values, policies and structure, and
4. practice with tools to increase resilience

Analysis of the survey was conducted in September and October of 2017. The statistical model predicting the degree to which TIPs had been implemented by respondents was found to be powerful, explaining almost two thirds of the variance in degree of implementation. All four factors had almost equal independent effects on the degree of implementation. More hierarchical organizations had fewer of these factors and were <u>less</u> likely to implement TIPs to the same degree as other smaller and non-for-profit organizations.

Communication of research on TIP implementation:
The first presentation of the results occurred via Skype with CRI members in October 2017, with summary power-point slides. The second presentation was face to face with the INVESTORS group in early December 2017. An abstract of the findings was submitted in mid-December for a proposed special issue of the Journal of Prevention and Intervention in the Community (JPIC) (15).

Actions taken:

- A new set of trainings, exercises and experiences – KISS framework (Figure 5) were developed by Teri Barila and Rick Griffin, executive director of Jubilee Leadership Academy, to increase the degree of implementation of TIPs among CRI organizations.
- CRI and research partnerships were sought and obtained for the implementation of a 21st Century After School 5-year program, aimed at increasing resilience among sets of

K-5 grade students in three poorer and more ethnically diverse elementary schools in Walla Walla.

- Teri Barila would provide trainings to the 21st Century school staff, as well as to teachers in the three elementary schools
- The Commitment to Community (C2C) staff would work with parents and neighborhoods on increasing social cohesion among the adults and socio-emotional support for the children
- The Friends organization would provide mentors to children when needed due to challenging family situations
- The Participatory Research Consultants would help develop shorter children resilience scales, based on both individual and contextual resilience aspects (family-peer-school-neighborhood supports), in cooperation with Machelle Madsen, author of the Children Resilience scales, using Michael Ungar's resilience measurement framework.

- The decision was made to pursue funding for a 2-3 year prospective study of how resilience could be increased in a target population in Walla Walla (12).

New question:
What would be the best design for a 2-3 year prospective study in Walla Walla?

Research on the design
A design for a prospective study has been proposed (12). It calls for:

- a pre-post- comparison group design, taking advantage of the new school TIP - Social-Emotional Learning (SEL) strategy implementation in the next 2-3 years
- measuring increases in both individual and contextual resilience between 3rd and 5th grade students and parents/caretakers, with current 5th graders as the same school comparison
- conducting qualitative process evaluations of teacher and parent/caretaker experiences in order to understand how the process of the separate components of the collective impact model affected them.

Communication of the design:
The plan is to conduct the study in 2019-21, as the school district implements its new strategic plan, with support from local foundations. The rationale is that this prospective design would:

- provide evidence that building capacity for different organizations, such as CRI, to work together in trauma-informed ways across different social domains – school, peers, family and neighbors, could actually increase resilience for a whole population
- provide results that may suggest improvements on how these organizations can work better together
- provide useful 'diffusion of innovation' evidence to other school in the district.

REFERENCES

1 Longhi D. Ph.D. in collaboration with Barila T., M.S., and Wendy Motulsky and Haley Friel. (Feb. 2015) Higher Resilience and School Performance Among Students with Disproportionately High Adverse Childhood Experiences (ACEs) at Lincoln High, in Walla Walla, Washington, 2009 to 2013 Research Report (available as Lincoln High School Resilience and Academics at https://resiliencetrumpsaces.org/resources/)

2 Longh D., Brown M. in collaboration with Barila T. (June 2015) Increasing Resilience to Moderate the Impact of ACES: Improving School Performance and Health: Research Results and Strategic Steps based on Evidence/Feasibility (power-point available on request)

3 Longhi D. and Theresa Barila T. (April 2015) A Strategy Paper on Improving School Performance - Increasing Resilience to 'Trump ACEs': Lessons Learned and Policy Implications from a Review of Traditional and Innovative Practices (available as Walla Walla Strategy Research Paper at https://resiliencetrumpsaces.org/resources/)

4 Fromm Reed S., Longhi D. and Brown M. (August 2016, presentation to APA national conference) Moving Beyond the Individual: The Importance of Community and Organizational Resilience as Buffers to Adverse Childhood Experiences (power-point available on request)

5 Longhi D., Brown M., and Fromm Reed S. (Dec 2017, draft paper to be submitted to AJCP) Community-Wide Resilience Moderates the Impacts of Adverse Childhood Experiences On Adult and Youth Levels of Health, School/ Work, and Coping Behaviors (abstract available on request)

6 Longhi D., PhD, and BrownM., EdD (March 2016) Trauma Informed Practices Implemented by Eleven Local Organizations, Members of the Children's Resilience Initiative, in Walla Walla, Washington State (available as Walla Walla Trauma Informed Practices at https://resiliencetrumpsaces.org/resources/)

7 Gruenberg J. and Fromm Reed S. (Oct. 2016) Re-thinking Paradigm Shifts: Youth Service Workers as People in their Context. THEory into ACTion: A Bulletin of New Developments in Community Psychology (available on request)

8 Longhi D., Brown M. and Gruenberg J. (Spring 2017) Walla Walla Trauma Informed Practices Implementation Survey (available as CRI Organizational Survey - Mental Model Shift at https://resiliencetrumpsaces.org/resources/)

9 Longhi D., Brown M. and Barila T. (Dec. 2017 power-point to Walla Walla Investors) Walla Walla's Journey to Better Community Well-being: What Works and How to Make it Happen (power-point available on request)

10 Barila T.. MS, Longhi D. PhD and Brown M. EdD (Nov., 2015) Scaffolding of Community Initiatives To Build Community Capacity and Increase Resilience: A Case Study of Walla Walla Community Network in Washington State An Example of the Family Policy Council (FPC) Stages Model (available as Walla Walla Scaffolding Initiatives to Increase Resilience at https://resiliencetrumpsaces.org/resources/)

11 Case H. (Aug. 2017) Walla Walla: A History of Building Community Resilience (available as The Haley Case Report at https://resiliencetrumpsaces.org/resources/)

12 Barila T., Longhi D., Brown M. in collaboration with Rodrigues A., Byrnes J. and Walla Wala School District (Dec. 2017) Draft Design of 3 Year Prospective Collective Impact Study in Walla Walla - How Trauma Informed and Empowering Practices in Schools and Neighborhoods Increase Contextual/Community Resilience that Improves Equity and School Performance (available on request)

13 Logan-Green P. Green S. Nurius, P. Longhi D. (2014) Distinct Contributions of Adverse Childhood Experiences and Resilience Resources: A Cohort Analysis of Adult Physical and Mental Health. Social Work in Health Care 53: 776-797

14 Nurius P. Green S. Logan-Green P. Longhi, D. Song C. (2016) Stress Pathways to Health Inequalities: Embedding ACEs within Social and Behavioral Contexts. International Public Health Journal 8(2)

15 Fromm Reed S., Longhi D., Brown M., Porter L. and Barila T. (Dec. 2017, paper proposed to JPIC) Decreasing Social Inequality by Building Community-Level Mindfulness around Adverse Childhood Experiences (ACEs) (proposal available on request)

Figure 1

Visual Display of Contextual Resilience's Moderating Effect for Adults

Decreasing Negative Impact of Level of ACEs on Rates of Serous Depression
Among 118 Communities in Washington State in 2009-12,
Statistically Controlling for the Effects of Poverty and Race/Ethnic Composition

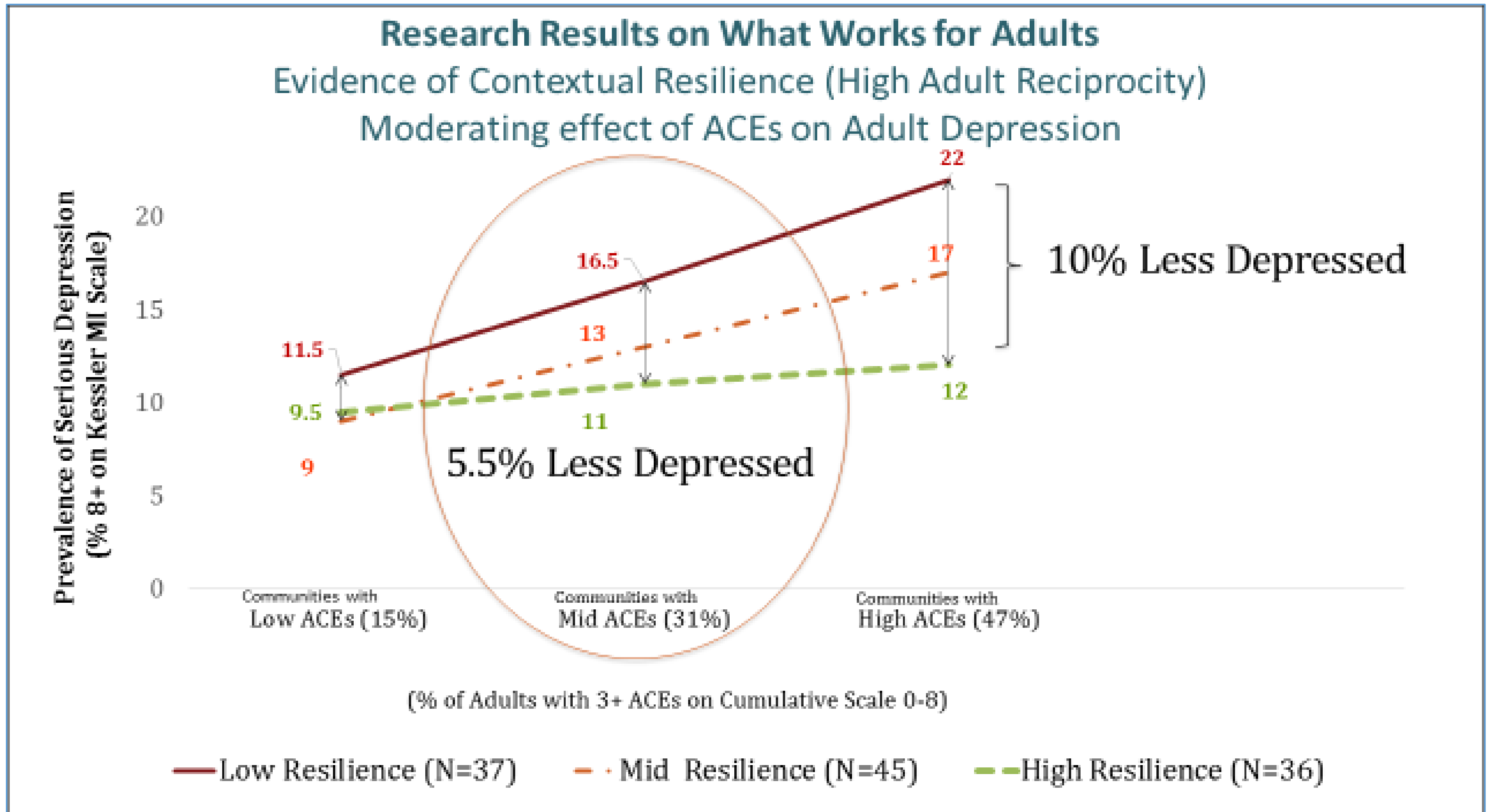


Figure 2

Visual Display of Contextual Resilience's Moderating Effect for Youth in 10th Grade

Decreasing Negative Impact of Level of ACEs on Risk of School Failure (HYS Risk Factor Scale
Among 103 Communities in Washington State in 2010—12,
Statistically Controlling for the Effects of Poverty and Race/Ethnic Composition

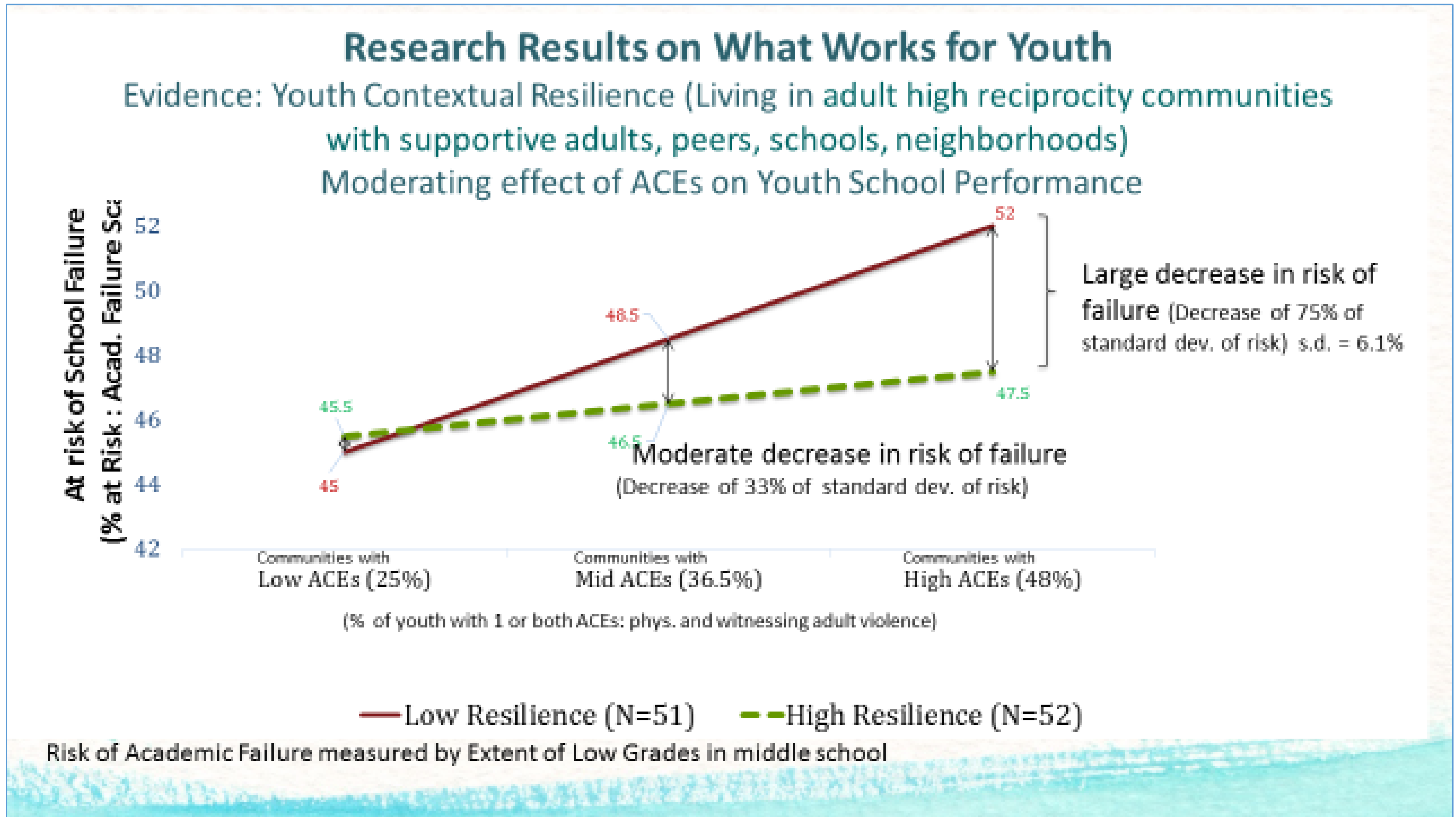
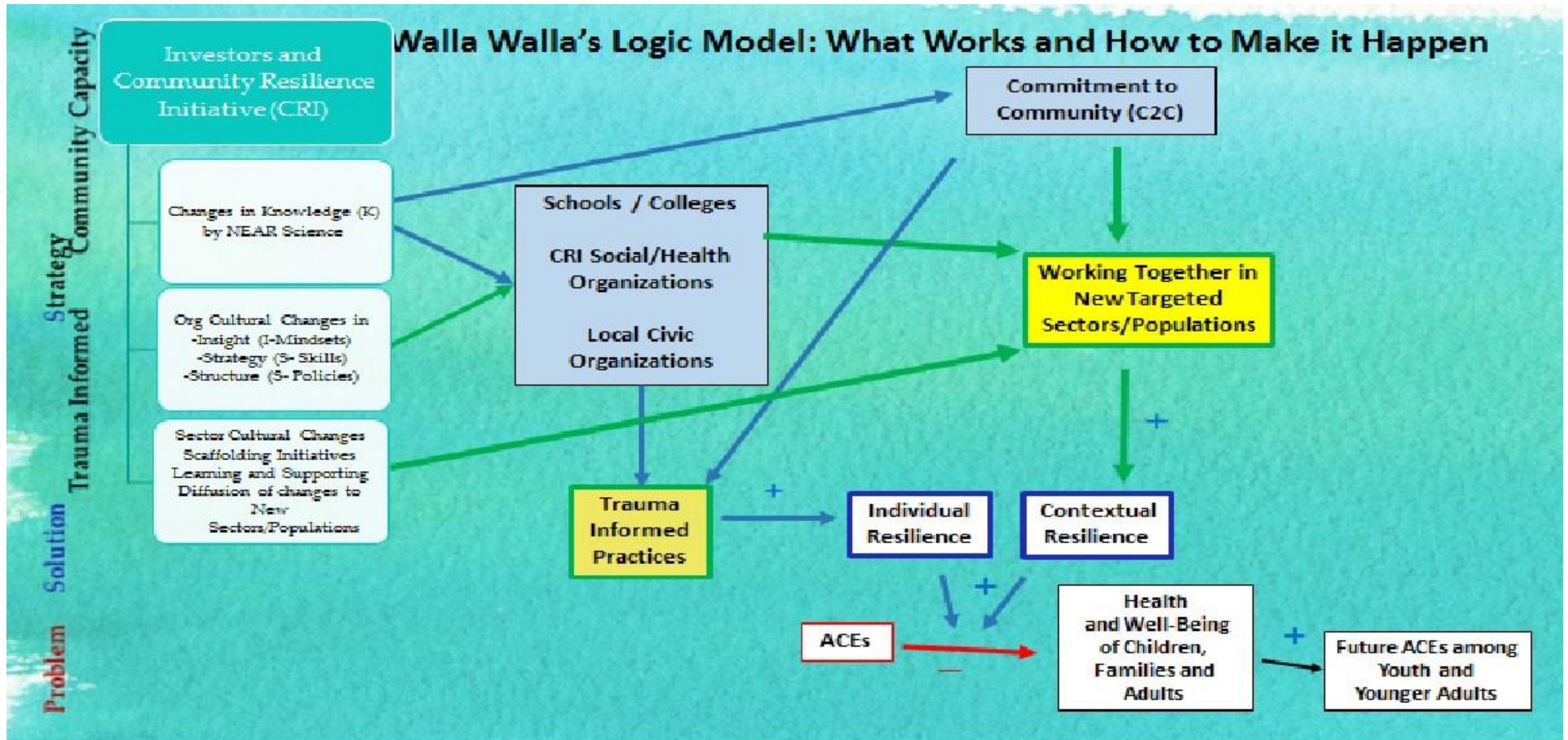


Figure 3



Note

The ***'problem'*** is depicted as the need to decrease the negative impact ACEs have on health and well-being, so that future generations have fewer ACEs

The '***solution'*** is identified as the desired increase in both individual and contextual resilience that has been shown to moderate the impact of ACEs

Two complementary **strategies** are depicted on how to increase resilience:

1. The greater adoption of trauma informed strategies by more staff/caregivers and more local organizations exposed to the four, KISS, research identified factors – Knowledge, Insight, Strategy and Structure – aided by the backbone structure and funding of the Investors and CRI
2. The greater focus on working together to increase contextual resilience, scaffolding and diffusing efforts to more populations and community sectors through greater collaboration among community organizers (C2C), schools, CRI social and health and local civic organizations

Figure 4

Visual of Scaffolding of Initiatives in Community Capacity Building Strategy to Increase Resilience

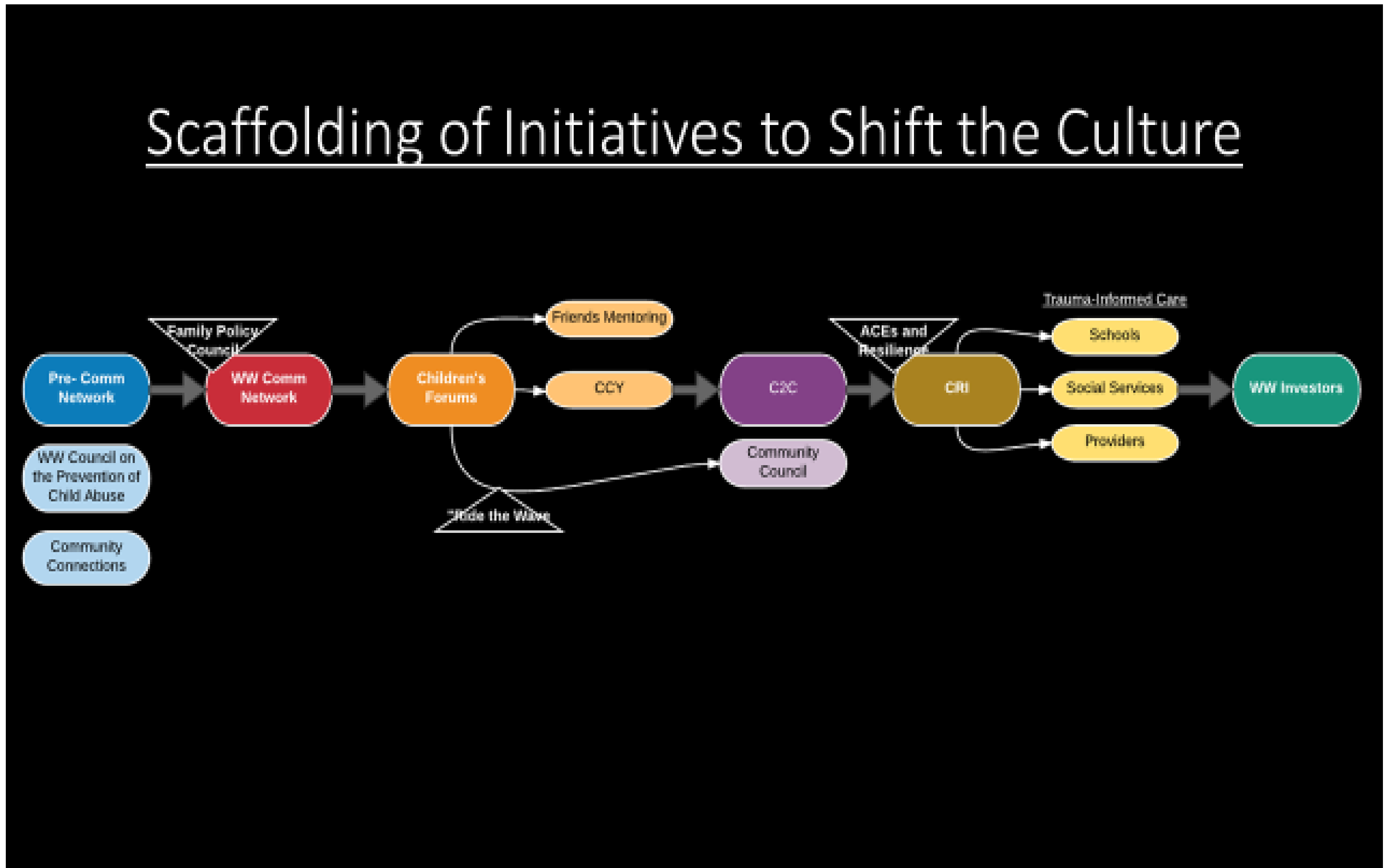


Figure 5

Visual of KISS Trainings and Interventions to Increase Capacity to Implement Trauma Informed Practices

Increasing Individual Resilience of Clients/Students and Contextual Resilience by Working Together