Ripple Effects Mapping:

A participatory method to document program and community impacts

2022 Alaska Indigenous Research Program

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Scott Chazdon, Ph.D., Evaluation and Research Specialist
   Extension Center for Community Vitality

Overview

- **Background**
- **Steps in the process**
  - **Planning and recruiting**
  - **Facilitation and mind mapping**
  - **Data analysis**
  - **Reporting strategies**
- **Benefits and limitations of REM**

Ripple Effects Mapping

- **Purpose – to better understand intended and unintended results of a program, intervention or collaborative for individuals, groups, sectors or communities.**

- **Can be post-program (more summative) or mid-program (more developmental)**

Intended and unintended impacts

- **People do not act in isolation -- strengthened social capital is a necessary pre-condition for other impacts**

- **In other words, "change flows along the lines of relationship" (Allen and Cherrey, 2000)**

- **Other impacts may occur that were not foreseen in program theory**

Allen, K. E. and Cherrey, C. (2000). *Systemic leadership: Enriching the meaning of our work.* Lanham, Maryland: University Press of America.
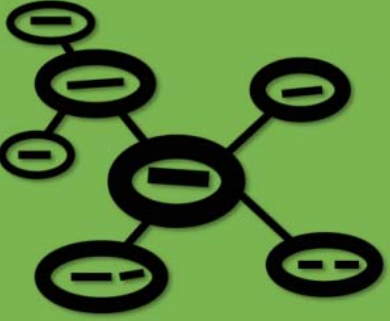
The core ingredients of REM

Appreciative Inquiry

Participatory Approach

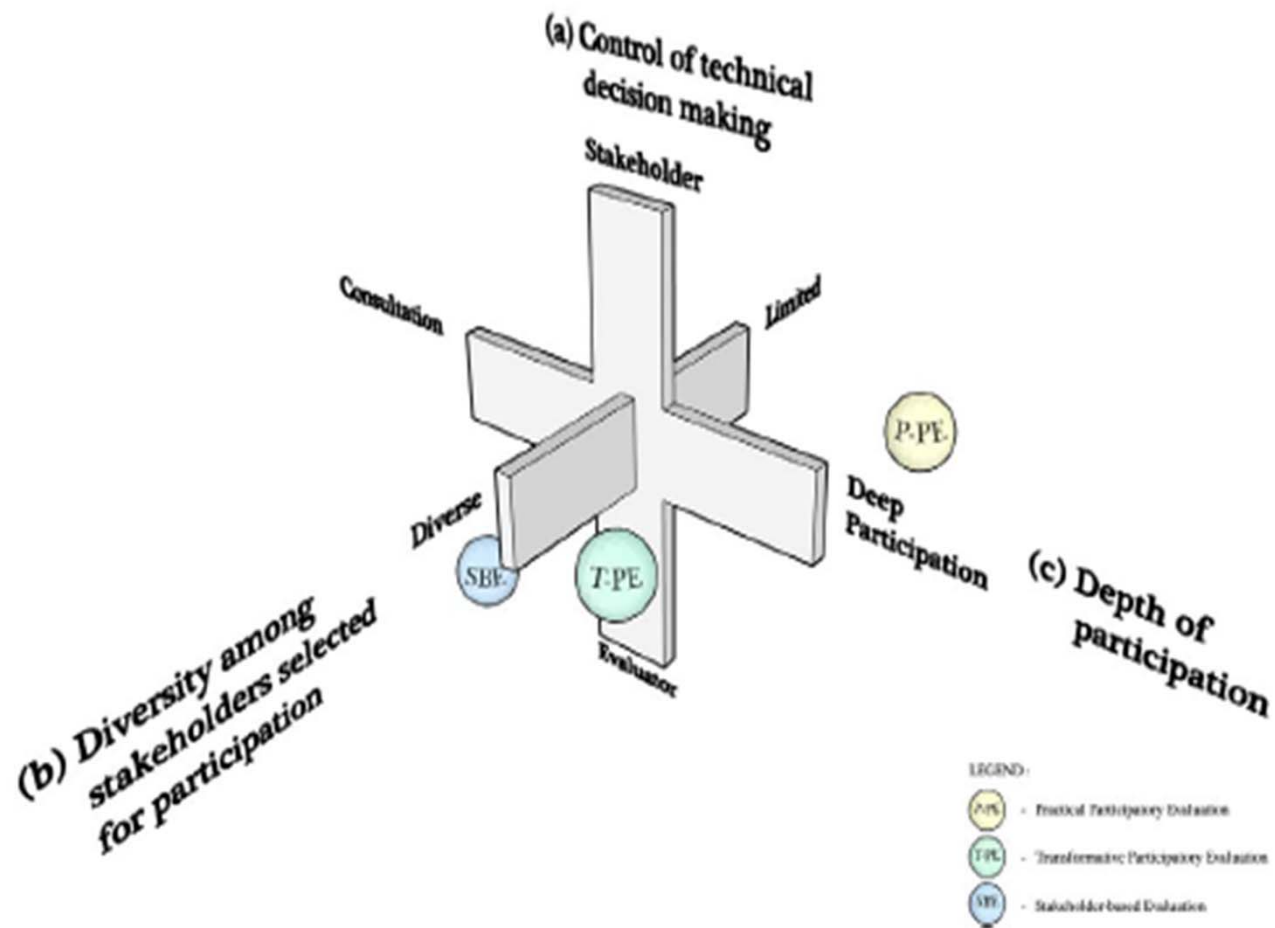**Interactive Group Interviewing and Reflection**

Radiant Thinking (aka Mind Mapping)

Dimensions of collaborative inquiry

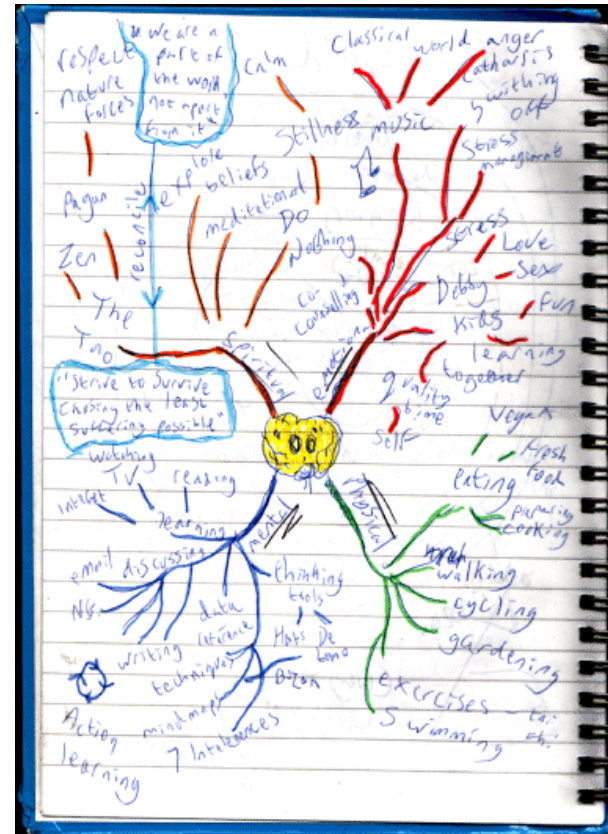From Cousins, J.B., Whitmore, E., & Shula, L. (2014). Let there be light. *American Journal of Evaluation, 35*(1), 149-153.

Mind mapping = "radiant thinking"

Pictorial method used for:

- **Note taking**
- **Brainstorming**
- **Organizing**
- **Problem solving**
- **Evaluation**

For more on mind mapping, see Buzan, T. (2003). *The mind map book*. London: BBC Books.

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How does it work?

- Identify the intervention
- Schedule the event and invite participants
- Convene group mapping session
- Conduct follow-up interviews
- Cleaning, Coding, Analysis
- Reporting

Early steps

- **Identify the intervention**
  - High engagement program or position
  - Cross-sector initiative
  - Collaboration
- **Invite stakeholder group**
  - Participants
  - Non-participant stakeholders
  - 12 to 20 participants
  - Two moderators

Appreciative inquiry interview

- **Conducted among pairs of participants**
- **Examples of questions:**
  - What is a highlight, achievement, or success from your participation in the program?
  - What new or deepened connections with others have you made as a result of your involvement with the program? What did these connections lead to?
  - What unexpected things happened as a result of your participation in the program?

Starting the map

- On wall with sticky notes or a sticky wall or using mind mapping software with data projector

- Floating topics generated from Appreciative Inquiry

Floating Topic

Floating Topic

Floating Topic

Floating Topic

Floating Topic

Floating Topic

Floating Topic

Ripple effects of community leadership program

Floating Topic

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Floating Topic

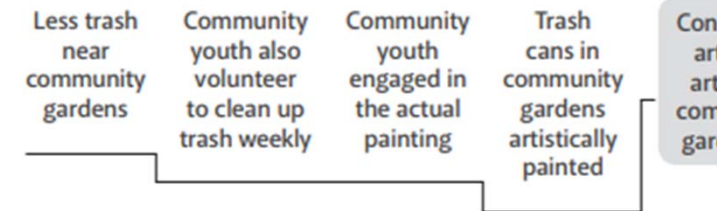Floating Topic

Floating Topic

Building the map

- ## Theming
  - Work with group to identify which items are closely related
  - Work with group to generate theme names
  - Floating topics moved and organized

- ## Rippling
  - Group cross-validation
  - Potential for probing using relevant framework

FIGURE II.4 Ripple effect chain, modified to include more stakeholde

| Less trash near community gardens | Community youth also volunteer to clean up trash weekly | Community youth engaged in the actual painting | Trash cans in community gardens artistically painted | Con ar art com gar |

Examples of contexts where REM has been a great fit

- **Community gardening**
- **Community leadership development**
- **Tribal opioid prevention program with youth**
- **Arts-based community development**
- **Community-based public health programs**

Demonstration of mind mapping interview results

- Capturing interview insights as "floating topics"
- Generating themes
- Generating ripple effect chains
- Discussing challenges
- Tips for using the software

Conducting an online REM

- Two virtual sessions, one or two weeks apart
- First session – paired Appreciative Inquiry interviews
- Use online software "breakout room" capacity
- Use Google Form to capture interview data

Conducting an online REM

- Between sessions, create draft mind map with themes (less participatory)
- Second session – share screen with draft mind map
- Edit/change themes
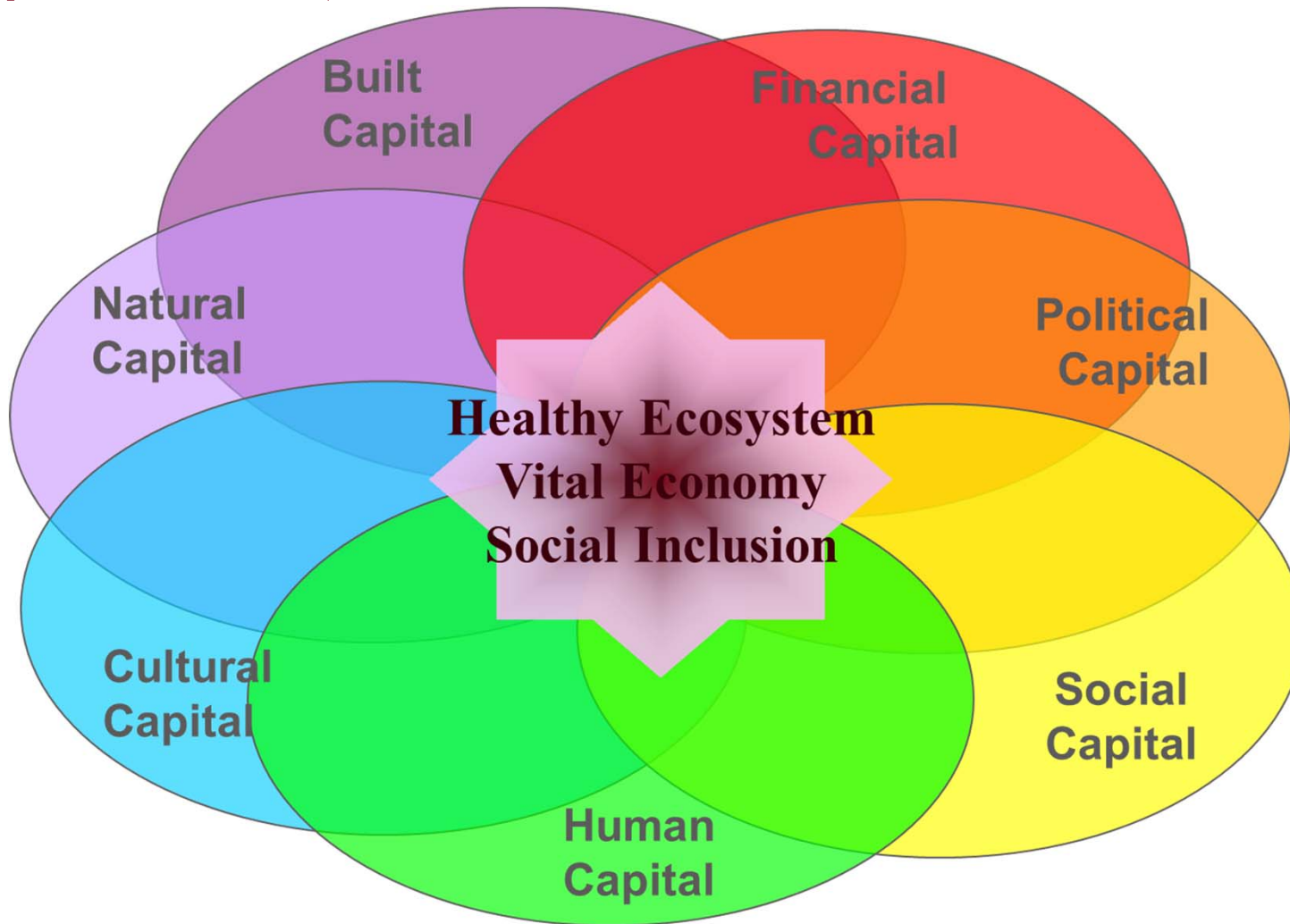- Add detail for ripple effect chains

Ripple effects map examples

Cleaning, coding & analysis

- Organize map to better identify pathways or combine pathways

- Download data to Excel for coding

- Code using relevant thematic framework and type of outcome

- Follow-up interviews if more clarity is needed

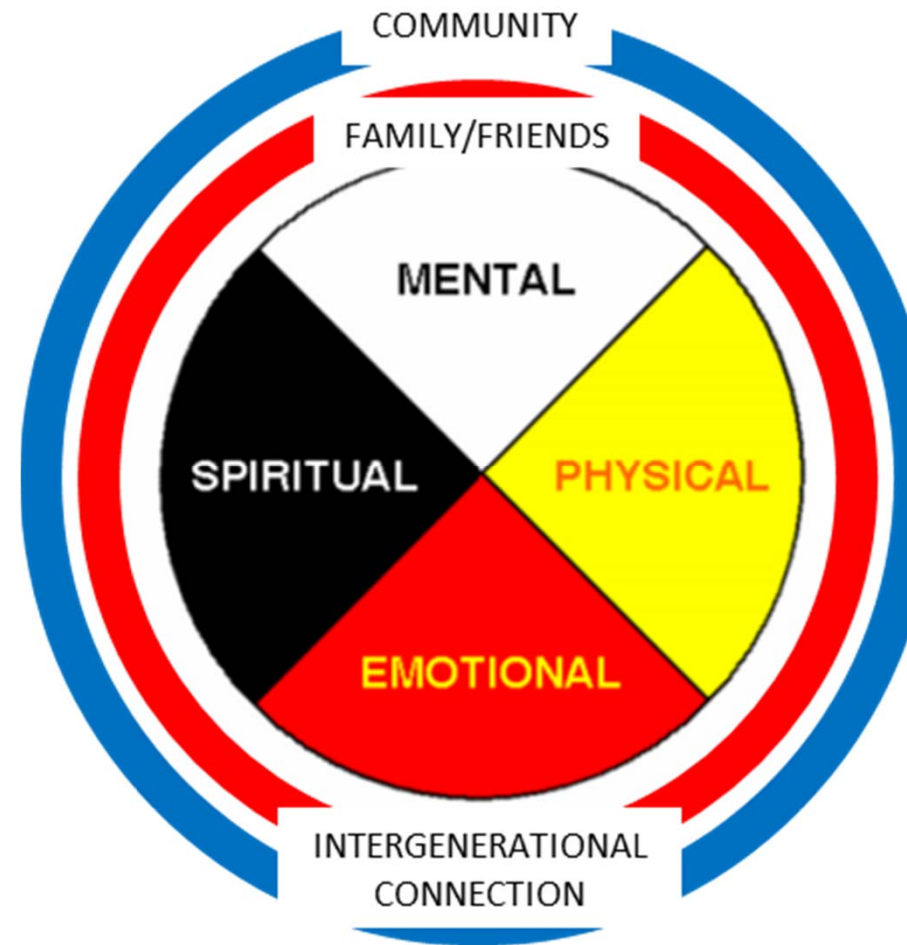# The Community Capitals Framework
(Emery and Flora, 2008)

Three approaches

	Web mapping	In-depth rippling	Theming and rippling
Use of Community Capitals	Used in the mapping process	Used to analyze data after the group session	Used to analyze data after the group session
Core focus of group time	Develop a deep and rich visualization of the causal chains that led to impacts, with an understanding of how impacts in one capital influence changes in the other capitals.	Develop a deep and rich visualization of the causal chains of events that led to impacts.	Develop a broad understanding of core impact themes as well as some visualization of causal chains of events that led to impacts.
Flow of session	1. Appreciative Inquiry 2. Reporting and mapping onto capitals framework of short term , medium term, and long term outcomes	1. Appreciative Inquiry 2. Reporting and rippling discussion	1. Appreciative Inquiry 2. Reporting 3. Theming 4. Ripple discussion 5. Negative effects discussion
Data analysis	Quantify the number of assets developed by capital.	1. Coding of data based on CCF 2. Quantify the number of assets developed by capital	1. Coding of data based on CCF 2. Quantify the number of assets developed by capital
Use of technology	Ripple map is captured on butcher paper and later typed into mind mapping software	Ripple map is captured on butcher paper and later typed into mind mapping software	Ripple map is typed directly into mind mapping software and project on screen

Emery, M., Higgins, L., Chazdon, S., and Hansen, D. (2015). Using Ripple Effect Mapping to evaluate program impact: Choosing or combining the methods that work best for you. *Journal of Extension 53*(2).

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oding the map with a edicine wheel amework

aluators working with indigenous mmunities have explored using the edicine wheel to guide evaluation sign and reporting. As applied to aluation, the medicine wheel elebrates both the diversity and unity our spiritual, mental, physical, and otional experiences.
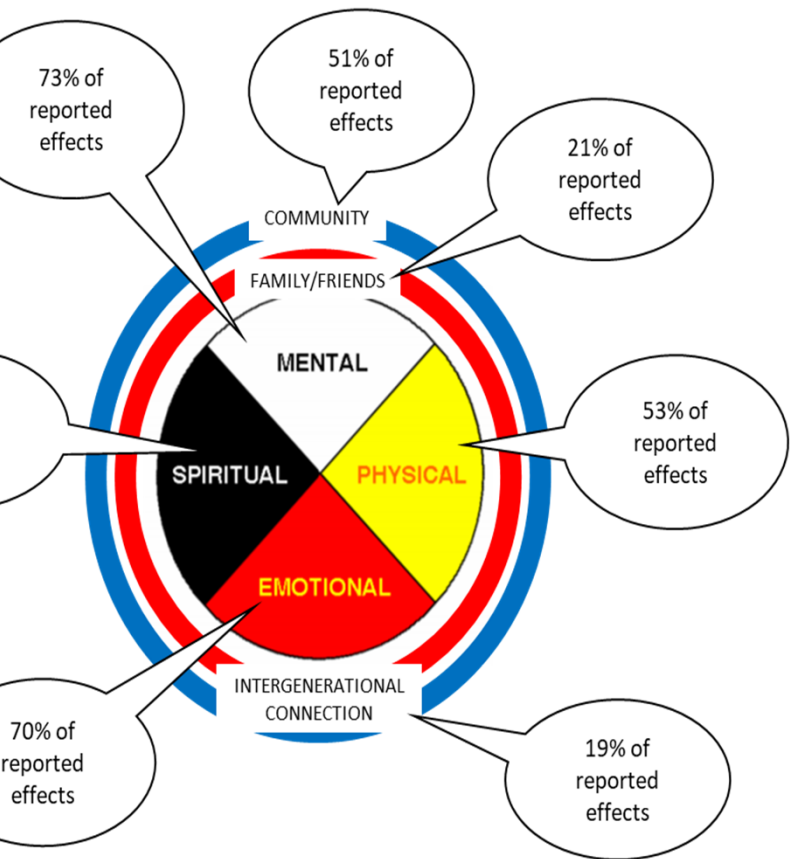
Coding Example

Ripple effects of the RHSE grant	Spiritual (Reflection, dignity, beliefs and values, openness, solidarity, connection)	Mental/Intellectual (knowledge, awareness, outlook, leadership perspective, understanding)	Physical (health, action, participation, hands-on skills)	Emotional (relationship building, empowerment, confidence, acceptance, appreciation, cooperation, struggle, ambition)	Intergenerational	Friends/Family	Community	Counted as effect?
Strengthening a sense of community								
Deeper relationships - stronger sense of belonging								
I led a training for about 12 - 15 people. Made a de	1			1			1	
Nothing has come out of that yet. She is anticipating that there will be some follow up when they get feedback from the training.								
Strengthened three relationships she already had. Has stay connected with friends new ar				1		1		
Strengthened some of the relatior	1	1		1			1	
Talking about how this can be effective with the kids. Ge		1						
There were several of my family members who were involved with the camps. Hard to say				1		1	1	
Going to every department, community, individuals	1			1	1		1	
Felt a greater se	1							1
I have met some people I didn't kr	1	1	1	1	1	1	1	1
This led to new friends, more con	1			1			1	1
The new connections was getting to know more people in the community. Had scattered r	1			1	1		1	1
Didn't enter into this expecting personal relationships was a major unexpected. Her husba	1			1		1		1
I don't just want to put my kids in a program, I'm pa	1			1			1	1
Especially during the pandemic, this project helped us connect with people who might not	1			1			1	1
New relationships								0
Meeting new people and seeing new people everyday. It has been good	1	1						1
Made about five new friends doing RHSE.						1		1
Every connection I made was pretty much new. I'm	1							1
So I do yoga with the kids, and all	1	1		1	1	1	1	1
I work in the community, so there are kids that are living the community but go to surround	1			1	1		1	1
While running summer camp made connections wi	1				1		1	1
Her child was isolated and was a	1			1	1		1	1
Connecting with staff and college								0
I think I have some better connections with Fond Du Lac natural resource	1	1					1	1

		Number of reported effects	Percentage of 70 reported effects	Illustrative examples
Aspects of well-being	Mental	51	72.9%	[The talking circle] was a learning experience for everyone. It was some... we can build on and learn how to gro... use the circle as a tool with zoom and... our community as well as in person.
	Emotional	49	70.0%	It made my heart happy every time I ... participated in an activity and the folk... were there. It's a really fun group to w... with. I always left feeling like I got mo... from the group than I gave.
	Physical	37	52.9%	Camp activities helped her with being... resilient. She had a hard time when th... the high ropes course the first time b... second time she was able to do it rea... well.
	Spiritual	27	38.6%	Mindfulness and staying present are ... core principles in our culture.
Social contexts that support well-being	Community	36	51.4%	Had scattered relationships and this ... allowed to link more relationships tog... Lead to more jointed conversations. A... connect daughter to the community ...
	Friends/ family	15	21.4%	My daughter is always teaching me th... She's a very deep thinker. She gets m... focus. I've seen some excellent copin... come out of the different opportunitie... she's exposed to.
	Intergenerational	13	18.6%	I did workshops and I was able to me... more people who I now connect with ... Facebook, pow wows and done more ... with. It has broadened my community... Mostly adults but some of the youth t... since my granddaughter was in the c...

Changing proportions of REV community accomplishments from year one through year three (Combined results across communities[2])

Bar chart data:

Category	End of year one (186 reported effects)	End of year two (271 reported effects)	End of year three (363 reported effects)
HUMAN	61%	52%	46%
SOCIAL	46%	46%	47%
CIVIC	25%	29%	27%
FINANCIAL	16%	24%	25%
BUILT	5%	7%	11%
CULTURAL	4%	7%	6%
NATURAL	1%	1%	1%
HEALTH	1%	1%	2%

■ End of year one (186 reported effects) ■ End of year two (271 reported effects)
■ End of year three (363 reported effects)
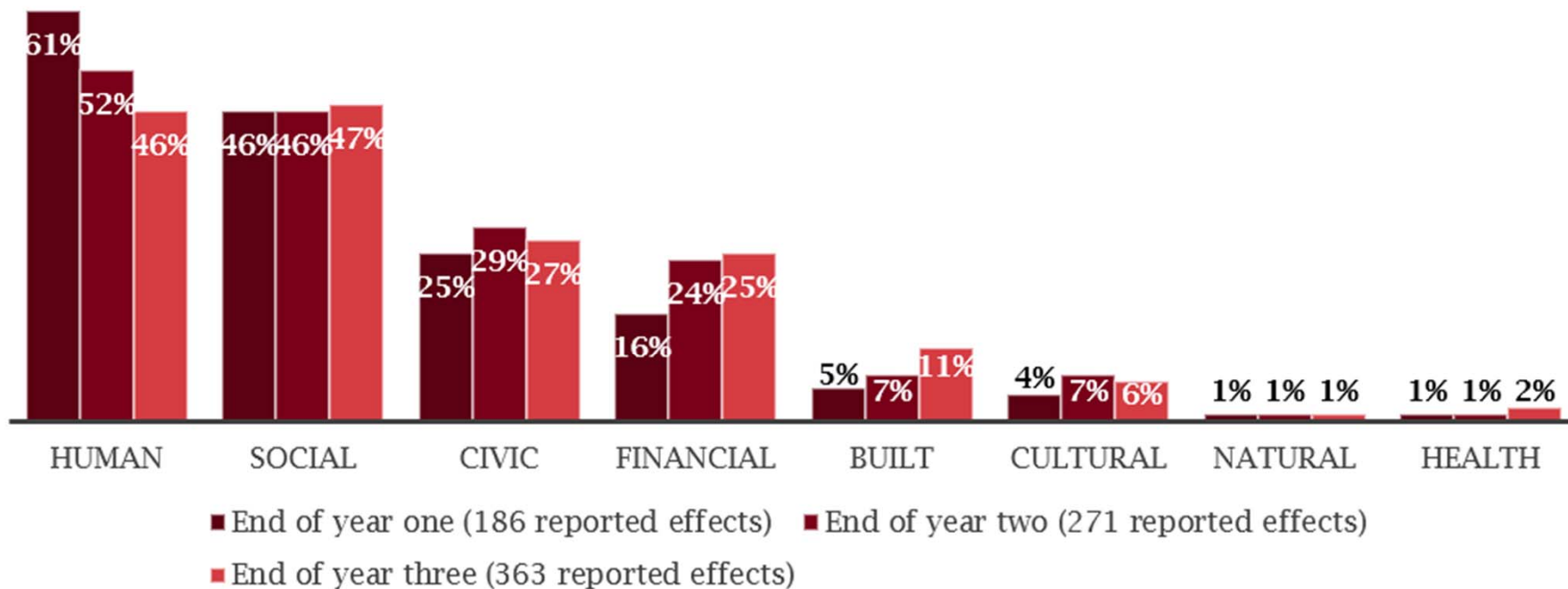
Eight principles of the East Side Community Health and Well-Being Collaborative

Effectiveness principles	Number of effects counted by coding team	Percent of total counted effects (N=125)	Examples of reported effects
Design for complexity (cultural diversity)	59	47.2%	Cultural brokers developed out of mental health and resiliency working group.
Put relationships first	53	42.4%	I have been able to connect with many other people in different agencies with whom we share the common goal of improving the community's well being
Actualize equity in health and well-being	48	38.4%	CLUES, KOM, and Wilder ask us to be more involved in the community events. They host events to provide dental care and have created a space where we can make deeper connections
Co-create (non-hierarchical decision making)	43	34.4%	Being involved in meal kit program, in collaboration with CLUES. Seeing how families are happier while preparing the meal kits at home. They were enthusiastic -- sometimes they would text pictures of the food. Wonderful to be part of this.
Neighborhood-based approach	41	32.8%	Decreased social isolation among East side organizations. You start building relationships and you end up going places you've never been.
Use strengths-based approach	40	32.0%	Increased connection among patients and community members through classes, tastings, and community celebrations
Respect autonomy	33	26.4%	I have a much deeper and broader understanding of the great community work ongoing on the East side as done by all the partner organizations
Design for sustainability	33	26.4%	Because of the community dialogue with Hmong community members, learned that the community wanted spaces that worked for them. Hmong American Partnership (HAP) decided for the first time ever to host their own national Night Out celebration.

Providing access to garden knowledge

As relationships and trust grew, they shared their knowledge and resources with community members--informally and formally, in backyards and community gardens. Now Master Gardeners are seen as a resource for garden knowledge and are sought to assist with community projects.

"Master Gardeners worked through the Peace Garden to bring plants and suggestions to other neighborhood gardens."

"Together with PPL, the strategy is to work with kids living in PPL properties to reach the adults."

"We have requested a train-the-trainer program from Master Gardeners."

"We leveraged access to Master Gardeners to get a hoop house (for Gordon Park High School.)."

Nurturing teaching and learning

After trusting relationships formed, community m
started to ask for garden information. As a result,
Gardeners now teach and assist, directly or indire
over ten garden programs in the neighborhood.

*"We're helping in the Peace Garden, teaching the k
grow and eat vegetables."*

"I've learned how to compost, how to grow my own

Community Gardening Efforts in Frogtown/Rondo

Creating economic opportunities

Community members said the gardens fostere
economic benefits, an unexpected 'ripple' that
resulted from the relationships and networks
developed.

*"Access to free produce increases the ability to,
families, friends and neighbors."*

"Providing economic alternatives for youth"

Promoting broader community activism

Gardens create a space and opportunity for community organizing on broader issues. Community members and Master Gardeners cited greater awareness of social justice issues that link gardening with community action.

"Urban farming connected us back to our environment. If our soil isn't healthy, then everything else isn't going to be healthy."

"He thought everyone gardened, but once he connected he saw a NEED for community gardeners. He became a voice with Summit-University planning committee (and became a Master Gardener)."

Preserving and creating green spac

As relationships developed, Master Gardener
added to the community's own energy for crea
preserving green spaces in the city. The comm
has gone on to create some large-scale, open-
gains.

*"I'm proud of our acquisition of Frogtown Park
a good investment not centered around crime an*

*"People are starting to think about how to look
as more than just a space for businesses!"*

Changing how universities engage with the community

Stronger, trusting relationships make it possible to have dialog about perceptions and difficult issues. Doing so starts to address barriers that keep people from engaging with programs, institutions, and communities. It is cause for examining how institutions structure programs, relate to individuals, and execute projects. This often means adapting to better meet the community.

"Diversity isn't just having people of color engaged, it is having people of color in leadership roles...."

"We tried to take University rules and make exceptions to do better work in the community"

Strengthening relationships

With the help and guidance of a community liaison, Extensio
Gardeners developed relationships founded on mutual learn
respect for the knowledge already held in the community. Th
just being present. Over time, being together in the gardens,
and 'showing up' led to strong connections and meaningful i

"The first year Master Gardeners just needed to learn to be present."

Infographics

Hastings, MN Tourism Assessment: key themes and impacts

In June 2019, the University of Minnesota Tourism Center engaged Hastings community members and tourism stakeholders in a Ripple Effects Mapping process to collect information on the impacts of the recent Tourism Assessment Program.

Changing perceptions of tourism

"Being involved really changed my outlook that tourism is an important piece...we need to work together to attract people and use this as an economic driver."

Growing new leadership

"[Getting involved] has grown my appreciation for a lot of the great things in Hastings and made me want to spread the word."

Increasing tangible investment

"People are building more connections with small and local businesses and spending their money to keep them going instead of going to the large businesses outside Hastings."

$18k Increase in one hotel's monthly revenue

$7k Increase in annual lodging tax revenue

Enhancing assets and increasing engagement

"People are actually going down and hanging out by the river. Families have picnics, people walk their dogs, ride their bikes, and play with their kids. It used to be a ghost town."

Increasing collaboration

"More people are stepping up...you can come with your idea and people will work to make it happen. This has resulted in successful projects."

65%

Stronger marketing

The increase [in visitor guide requests] from last year is over 65%, not just from the Twin Cities but all over the country."

University of Minnesota Tourism Center   www.tourism.umn.edu

Infographics

Fig. 1 Ripple Effects Mapping: Results from Recreovía study and My Body study

Rubio, M. A., et al (2022). Innovative participatory evaluation methodologies to assess and sustain multilevel impacts of two community-based physical activity programs for women in Colombia. *BMC public health, 22*(1), 1-15.

Ripple Effects of the RHSE Grant

In August 2020, the Fond du Lac Tribal Extension Program held a virtual Ripple Effects Mapping (REM) evaluation of the RHSE grant. The REM process engaged parents, youth participants, program instructors, staff, and other community members to reflect on their experiences with the RHSE Grant. These core themes emerged from the process.

Strengthening a sense of community

Participants described a sense of deepening relationships they already had, weaving together scattered relationships into a tighter web, feeling more able to connect to the broader community.

> *I didn't enter into this expecting personal relationships - this was a major unexpected result. My husband built personal relationships too. The impact was on the whole family.*

Learning and applying healthy coping skills

Self defense activities, yoga classes, and lacrosse games helped youth tune in to their emotions, calm their nerves, and become more open to wisdom of others.

> *We did different circles about different themes, how to fill your bucket and fill other people's buckets. It takes time and it doesn't happen over night, but we try to take a look at different things we can do. Different ways to look at things and different perspectives.*

Planting seeds of hopefulness

There was a sense of hopefulness and possibility in many of the comments. Parents were impressed at how eager the kids were to participate and become engaged.

> *It was surprising how much the youth liked the yoga. All of it had value with the camp and workshops.*

Gaining confidence in positive leadership skills

A consistent theme about youth experience in the grant was their increased confidence. A staff member thought that exposing kids who are not natural leaders to other kids who have more leadership traits had an impact.

> *The ropes course was a great experience because some kids that spoke were sometimes not the ones that normally spoke. It was an experience where everyone had to pull together to be a success.*

## Reclaiming our culture and creating a sense of well-being

Many participants highlighted the ways that grant efforts were strengthening their connections to Ojibwe language and cultural teachings.

> *I'm now in touch with the head of pharmacy program at UMD and learning about their medicinal program and reclaiming medicinal plants. It's sad that it takes so much to reclaim our culture but we're moving there.*

Opportunities moving forward

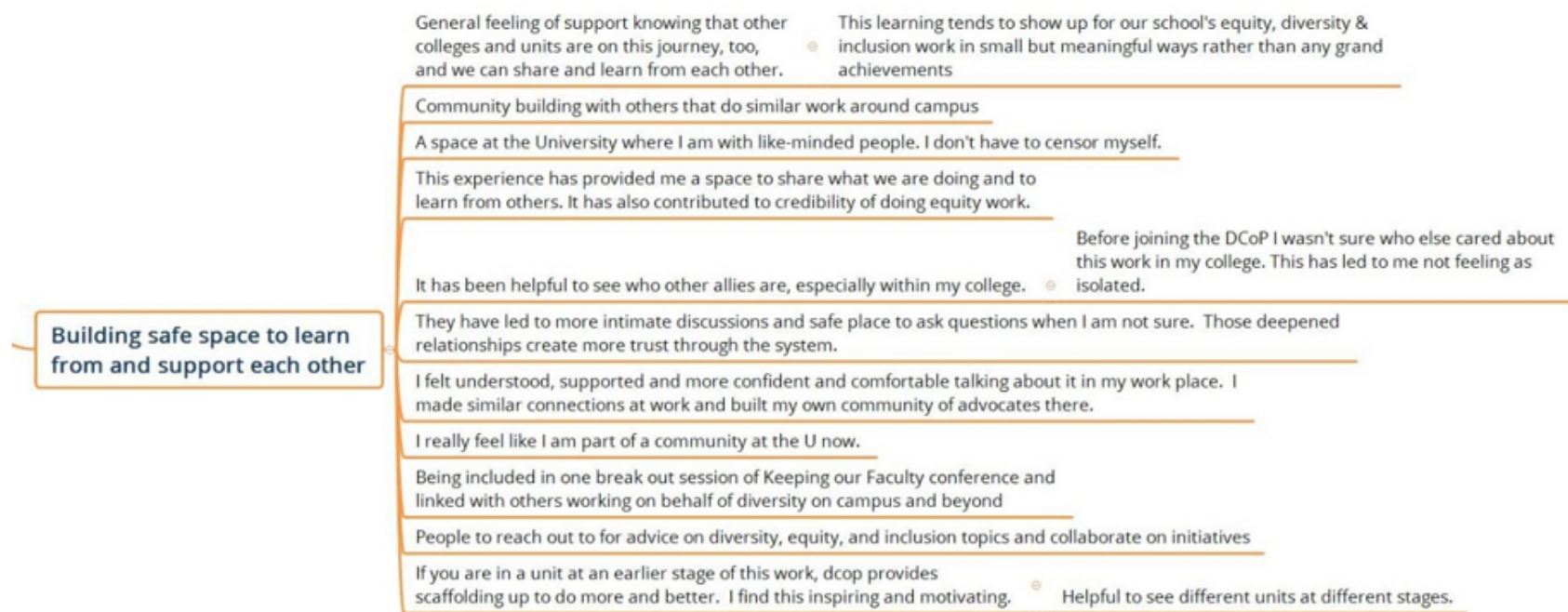The group discussed challenges they faced during the grant process that were really opportunities to make adjustments in future programming.

> *It would help to have different age groups do this activity. Developmentally, the topics that come up for different ages are different. The younger kids didn't want to share with older kids. They don't want to share something they might get teased about.*
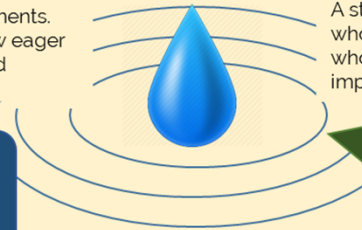
Building safe space to learn from and support each other. DCoP members feel supported by in their efforts in the group to strengthen equity and diversity efforts in their own departments. One participant noted that "if you are in a unit at an earlier stage of this work, DCoP provides scaffolding up to do more and better." Another participant noted that the group has created a safe space for difficult conversations about racism and other forms of injustice. Powerfully, another member wrote that "I really feel like I am part of a community at the U now."

General feeling of support knowing that other colleges and units are on this journey, too, and we can share and learn from each other.

This learning tends to show up for our school's equity, diversity & inclusion work in small but meaningful ways rather than any grand achievements

Community building with others that do similar work around campus

A space at the University where I am with like-minded people. I don't have to censor myself.

This experience has provided me a space to share what we are doing and to learn from others. It has also contributed to credibility of doing equity work.

Before joining the DCoP I wasn't sure who else cared about this work in my college. This has led to me not feeling as isolated.

It has been helpful to see who other allies are, especially within my college.

Building safe space to learn from and support each other

They have led to more intimate discussions and safe place to ask questions when I am not sure. Those deepened relationships create more trust through the system.

I felt understood, supported and more confident and comfortable talking about it in my work place. I made similar connections at work and built my own community of advocates there.

I really feel like I am part of a community at the U now.

Being included in one break out session of Keeping our Faculty conference and linked with others working on behalf of diversity on campus and beyond

People to reach out to for advice on diversity, equity, and inclusion topics and collaborate on initiatives

If you are in a unit at an earlier stage of this work, dcop provides scaffolding up to do more and better. I find this inspiring and motivating.

Helpful to see different units at different stages.

Skill Set Needed

- **Facilitation/group process skills**
- **Interviewing and probing**
- **Technology and typing (if you're gonna do live capture)**
- **Qualitative analysis**
- **Commitment to participatory evaluation**

Benefits and Limitations

Benefits

- Simple and cheap tool
- Captures impacts of complex or evolving work
- Participatory and appreciative approach that engages stakeholders
- Group validation of results

Limitations

- Risk of bias in participant selection and data collection
- Participants may not have complete information about a program or program outcomes
- Potential for inconsistency in implementation

Suggestions

- Use same facilitator, recorder and "mapper"
- Develop a facilitator guide with ideas for probes.
- Make decision prior to mapping whether to use a pre-existing framework as probes during group interviews
- May need to recognize that one organization isn't trying to take all credit for all change
- It is important to probe for negatives

Lessons learned

- Find the right balance between breadth and depth
- Schedule the event along with another activity
- Put much effort into recruitment and explaining the process
- Choose a good setting – not too informal
- Use external facilitators, not program staff

Q&A and Discussion

- **How might you use this?**

- **What types of programs would be the best fit for this type of evaluation?**

- **What concerns do you have about this method?**

Thank you!
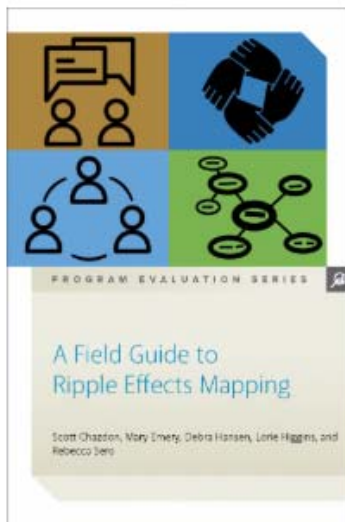
A Field Guide to Ripple Effects Mapping

edited by Scott Chazdon, Mary Emery, Debra Hansen, Lorie Higgins, and Rebecca Sero

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Scott Chazdon, Ph.D.
Evaluation and Research Specialist
Center for Community Vitality
612-624-0982
schazdon@umn.edu

A DIFFERENCE IN MINNESOTA: ENVIRONMENT + FOOD & AGRICULTURE + COMMUNITIES + FAMILIES + YOUTH