Evaluating a Collective Impact Effort to Broaden STEM Participation *on a Shoestring*

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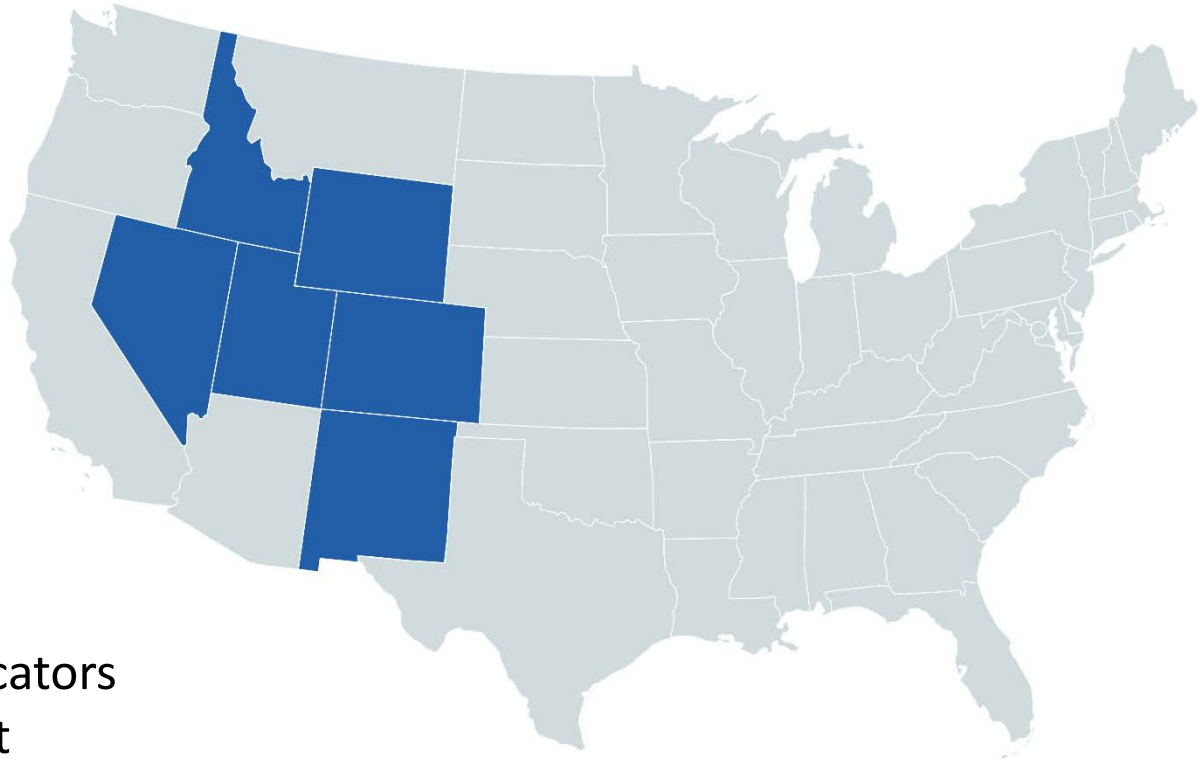
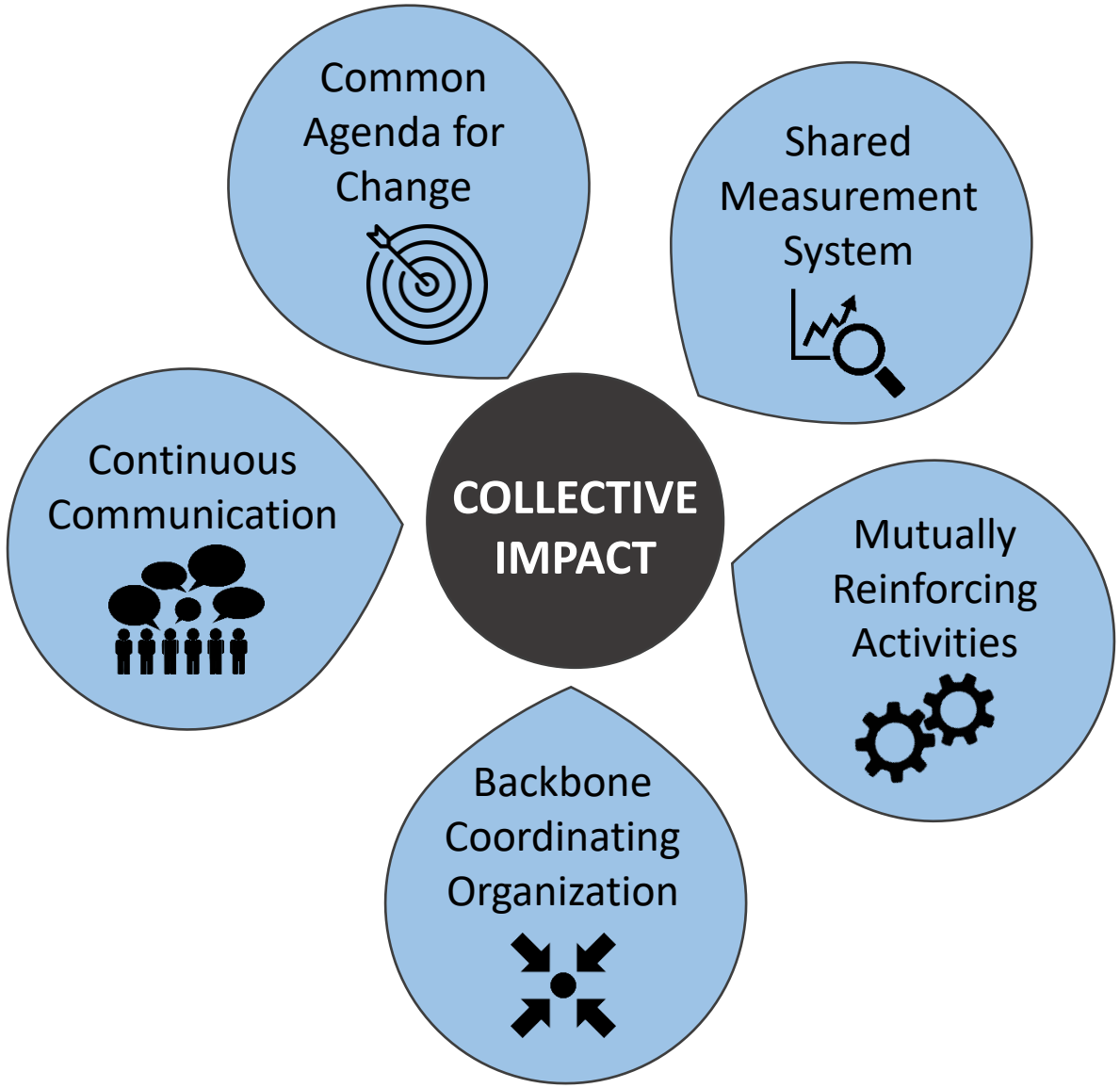
IMSTEM



Intermountain STEM is a network of STEM educators and leaders across six states working to support STEM equity at key transition points (middle school to high school and high school to college)

https://napequity.org/stem/stem-equity-project/imstem/



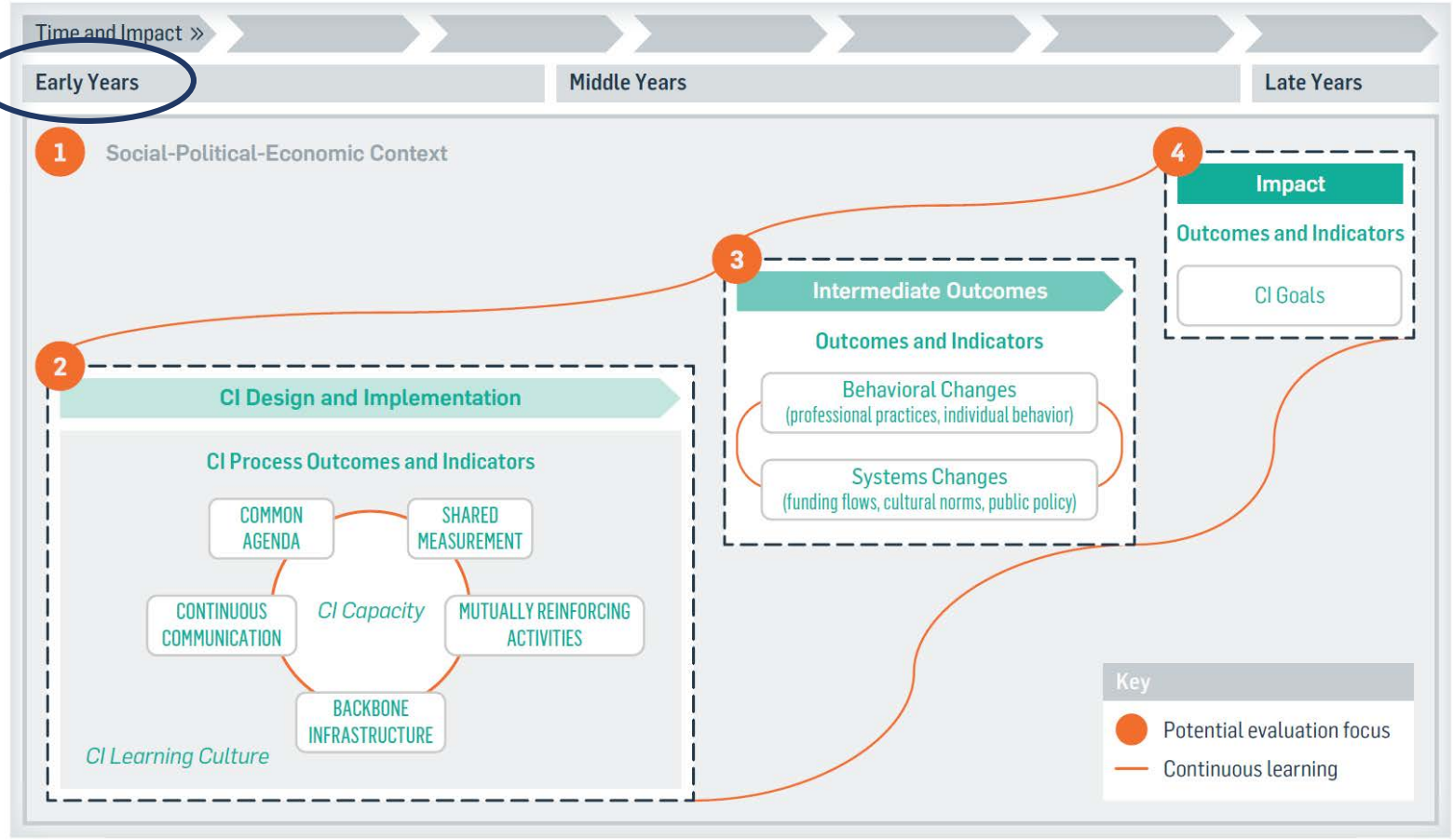
We framed our evaluation design around the 5 core conditions of collective impact.

Kania, J., & Kramer, M. (2011). Collective impact. *Stanford Social Innovation Review*, *1*(9), 36-41. https://ssir.org/articles/entry/collective_impact

FSG and the Collective Impact Forum's

Framework for Performance Measurement and Evaluation of Collective Impact Efforts

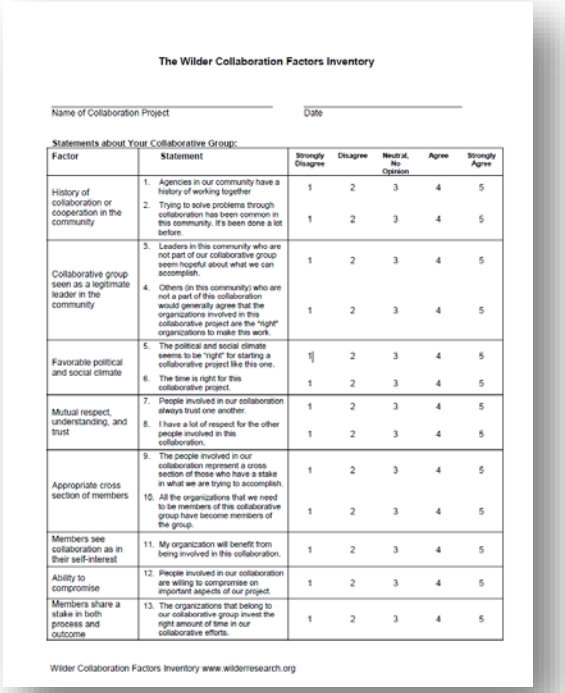
IM STEM was here



Preskill, H., Parkhurst, M. & Juster, J. (2014). *Guide to Evaluating Collective Impact: Learning and Evaluation in the Collective Impact Context*. https://www.fsg.org/publications/guide-evaluating-collective-impact

1 Designed survey and interview protocols around 5 core conditions of collective impact

Wilder Collaborative Factors Inventory (WCFI)



The Wilder Collaboration Factors Inventory

Name of Collaboration Project _____ Date _____

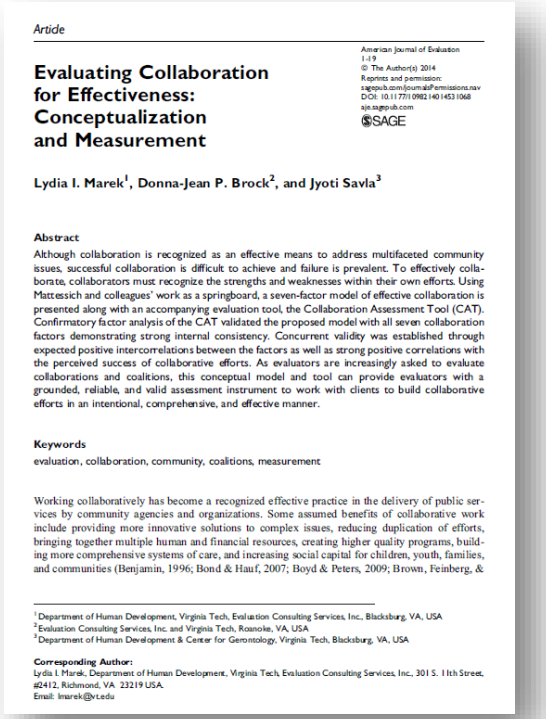
Statements about Your Collaborative Group:

Factor	Statement	Strongly Disagree	Disagree	Neutral, No Opinion	Agree	Strongly Agree
History of collaboration or cooperation in the community	1. Agencies in our community have a history of working together	1	2	3	4	5
	2. Trying to solve problems through collaboration has been common in this community. It's been done a lot before.	1	2	3	4	5
Collaborative group seen as a legitimate leader in the community	3. Leaders in this community who are not part of our collaborative group seem hopeful about what we can accomplish.	1	2	3	4	5
	4. Others (in this community) who are not a part of this collaboration would generally agree that the organizations involved in this collaborative project are the "right" organizations to make this work.	1	2	3	4	5
Favorable political and social climate	5. The political and social climate seems to be "right" for starting a collaborative project like this one.	1	2	3	4	5
	6. The time is right for this collaborative project.	1	2	3	4	5
Mutual respect, understanding, and trust	7. People involved in our collaboration always trust one another.	1	2	3	4	5
	8. I have a lot of respect for the other people involved in this collaboration.	1	2	3	4	5
Appropriate cross section of members	9. The people involved in our collaboration represent a cross section of those who have a stake in what we are trying to accomplish.	1	2	3	4	5
	10. All the organizations that we need to be members of this collaborative group have become members of the group.	1	2	3	4	5
Members see collaboration as in their self-interest	11. My organization will benefit from being involved in this collaboration.	1	2	3	4	5
Ability to compromise	12. People involved in our collaboration are willing to compromise on important aspects of our project.	1	2	3	4	5
Members share a stake in both process and outcome	13. The organizations that belong to our collaborative group invest the right amount of time in our collaborative efforts.	1	2	3	4	5

Wilder Collaboration Factors Inventory www.wilderresearch.org

http://wilderresearch.org/tools/cfi/form.php

Collaboration Assessment Tool (CAT)



Article

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Evaluating Collaboration for Effectiveness: Conceptualization and Measurement

Lydia I. Marek[1], Donna-Jean P. Brock[2], and Jyoti Savla[3]

Abstract

Although collaboration is recognized as an effective means to address multifaceted community issues, successful collaboration is difficult to achieve and failure is prevalent. To effectively collaborate, collaborators must recognize the strengths and weaknesses within their own efforts. Using Mattessich and colleagues' work as a springboard, a seven-factor model of effective collaboration is presented along with an accompanying evaluation tool, the Collaboration Assessment Tool (CAT). Confirmatory factor analysis of the CAT validated the proposed model with all seven collaboration factors demonstrating strong internal consistency. Concurrent validity was established through expected positive intercorrelations between the factors as well as strong positive correlations with the perceived success of collaborative efforts. As evaluators are increasingly asked to evaluate collaborations and coalitions, this conceptual model and tool can provide evaluators with a grounded, reliable, and valid assessment instrument to work with clients to build collaborative efforts in an intentional, comprehensive, and effective manner.

Keywords

evaluation, collaboration, community, coalitions, measurement

Working collaboratively has become a recognized effective practice in the delivery of public services by community agencies and organizations. Some assumed benefits of collaborative work include providing more innovative solutions to complex issues, reducing duplication of efforts, bringing together multiple human and financial resources, creating higher quality programs, building more comprehensive systems of care, and increasing social capital for children, youth, families, and communities (Benjamin, 1996; Bond & Hauf, 2007; Boyd & Peters, 2009; Brown, Feinberg, &

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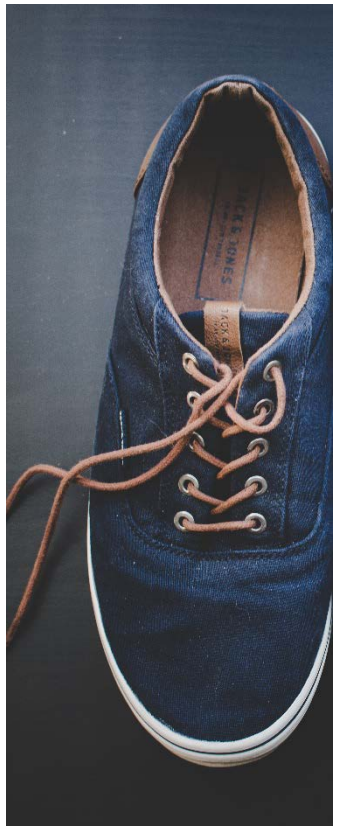
Marek, L.I., Brock, D.P., & Savla, J. (2015). Evaluating collaboration for effectiveness: Conceptualization and measurement. *American Journal of Evaluation*, 36(1), 67-85.

- Mapped WCFI & CAT onto CI framework and decided which items to include on our survey
- Reported evaluation findings by each CI element

2 Developed set of early performance indicators with project team



IM STEM Project Metrics (Sources)

Outcome	Metrics (Evidence outcomes have been achieved or will be achieved)	Source of Metrics
Steering Committee members are actively involved in IM STEM effort	• Steering Committee members attend meetings regularly (at least 75% of meetings) and are engaged in Working Groups • Steering Committee meetings are attended by at least one representative from each IM STEM state	• Steering Committee meeting notes
	• Evidence of network building (e.g., communication that occurs directly between states outside of formal IM STEM meetings)	• Year 2 Survey
	• Working Groups produce tangible products (e.g., asset maps)	• Year 2 Survey • Review docs in IM STEM Google Drive
	• Steering Committee members engage (potential) new members to join the IM STEM Network	• Year 2 Survey
IM STEM states regularly share data to monitor progress in closing equity gaps (Metrics, Data Collection and Reporting)	• A set of common metrics developed for identifying gaps in STEM participation and achievement at each critical juncture	• Year 2 Survey • Review Working Group meeting notes *(work in progress)*
	• A pilot dashboard has been created for one IM state using Perkins data	• Interview PI during monthly evaluation check-in • Interview with ID data contact, Heather Luchte
	• Determine the feasibility of developing a common data dashboard developed for continuous monitoring and annual updating	• *N/A during timeframe of evaluation*
	• State data contacts report IM STEM has provided a value-add in the process for conducting a gap analysis for Perkins state planning	• Tent.: Evaluator attends Working Group meeting
IM STEM Network is growing and engaged (Outreach and Communications Workgroup)	• Attendance at Network meetings	• Review Working Group meeting notes • IM STEM Network meeting notes
	• Number and affiliations of State Network members	• IM STEM Network meeting notes
	• Social media metrics (Twitter, LinkedIn)	• *Internal project tracking [evaluation will not report]*
	• Newsletter recipients open links included in IM STEM Network newsletter	• *Internal project tracking [evaluation will not report]*
IM STEM has influenced implementation of best practices (Effective	• A rubric has been created that helps administrators, funders and others evaluate STEM-related programs or organizations to determine the degree to which it is inclusive and supports access and success for students who historically have not engaged in STEM.	• Year 2 Survey • Review Working Group meeting notes • Review docs in IM STEM Google Drive • Informal, short "survey" at Leadership Summit workshop session on rubric (asking for feedback, expected uses, etc.)

Reflections of a shoestring evaluator

- Challenge to **balance desire** to conduct developmental evaluation, collect and analyze qualitative data, and provide rich contextual description **with realities of budget**
- Tough decisions about **what to include and exclude**
- Use or adapt **existing tools** measuring collaborations
- Share role of collecting data with project team (“**Shared Measurement**”)

IMSTEM

https://napequity.org/stem/stem-equity-project/imstem/

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*Look for an **upcoming article** on NAPE's website later this year about what we learned using a collective impact approach for a multi-state effort (https://napequity.org/)