Embracing Emergence:
How Collective Impact Addresses Complexity
By John Kania & Mark Kramer

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Embracing Emergence: How Collective Impact Addresses Complexity

Collective impact efforts are upending conventional wisdom about the manner in which we achieve social progress.

BY JOHN KANIA & MARK KRAMER

Organizations around the world have begun to see collective impact as a new and more effective process for social change. They have grasped the difference our past articles emphasized between the isolated impact of working for change through a single organization versus a highly structured cross-sector coalition. Yet, even as practitioners work toward the five conditions of collective impact we described earlier, many participants are becoming frustrated in their efforts to move the needle on their chosen issues. (See “The Five Conditions of Collective Impact” to right.)

Collective impact poses many challenges, of course: the difficulty of bringing together people who have never collaborated before, the competition and mistrust among funders and grantees, the struggle of agreeing on shared metrics, the risk of multiple self-anointed backbone organizations, and the perennial obstacles of local politics. We believe, however, that the greatest obstacle to success is that practitioners embark on the collective impact process expecting the wrong kind of solutions.

The solutions we have come to expect in the social sector often involve discrete programs that address a social problem through a carefully worked out theory of change, relying on incremental resources from funders, and ideally supported by an evaluation that attributes to the program the impact achieved. Once proven, these solutions can scale up by spreading to other organizations.

The problem is that such predetermined solutions rarely work under conditions of complexity—conditions that apply to most major social problems—when the unpredictable interactions of multiple players determine the outcomes. And even when successful interventions are found, adoption spreads very gradually, if it spreads at all.

Collective impact works differently. The process and results of collective impact are emergent rather than predetermined, the necessary resources and innovations often already exist but have not yet been recognized, learning is continuous, and adoption happens simultaneously among many different organizations.

In other words, collective impact is not merely a new process that supports the same social sector solutions but an entirely different model of social progress. The power of collective impact lies in the

The Five Conditions of Collective Impact

<table>
<thead>
<tr>
<th>Common Agenda</th>
<th>All participants have a shared vision for change including a common understanding of the problem and a joint approach to solving it through agreed upon actions.</th>
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<tr>
<td>Shared Measurement</td>
<td>Collecting data and measuring results consistently across all participants ensures efforts remain aligned and participants hold each other accountable.</td>
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<tr>
<td>Mutually Reinforcing Activities</td>
<td>Participant activities must be differentiated while still being coordinated through a mutually reinforcing plan of action.</td>
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<tr>
<td>Continuous Communication</td>
<td>Consistent and open communication is needed across the many players to build trust, assure mutual objectives, and create common motivation.</td>
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<tr>
<td>Backbone Support</td>
<td>Creating and managing collective impact requires a separate organization(s) with staff and a specific set of skills to serve as the backbone for the entire initiative and coordinate participating organizations and agencies.</td>
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John Kania is managing director of FSG, focusing on inspiring social sector organizations—both individually and collectively—to achieve excellence in their work. He has led dozens of strategic planning and evaluation efforts for foundations, nonprofits, corporations, and governments.

Mark Kramer is founder and managing director of FSG, overseeing the firm’s overall vision and direction. He is widely published, speaks around the world, and has led consulting engagements across all of FSG’s areas of focus. Kramer is also a senior fellow at the Harvard Kennedy School.
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It would be hard to deny that most large-scale social problems are complex. Issues such as poverty, health, education, and the environment, to name just a few, involve many different interdependent actors and factors. There is no single solution to these problems, and even if a solution were known, no one individual or organization is in a position to compel all the players involved to adopt it. Important variables that influence the outcome are not and often cannot be known or predicted in advance. Under these conditions of complexity, predetermined solutions rarely succeed.

Predetermined solutions work best when technical expertise is required, the consequences of actions are predictable, the material factors are known in advance, and a central authority is in a position to ensure that all necessary actions are taken by the appropriate parties. Administering the right medicine to a patient, for example, generally gives predetermined results: the medicine has been proven to work, the benefits are predictable, the disease is well understood, and the doctor can administer the treatment. Much of the work of the nonprofit and public sectors is driven by the attempt to identify such predetermined solutions. In part, this is due to the expectations of funders and legislators who understandably want to know what their money will buy and predict how the discrete projects they fund will lead to the impacts they seek.

Unlike curing a patient, problems such as reforming the US health care system cannot be accomplished through predetermined solutions. No proven solution exists, the consequences of actions are unpredictable, and many variables—such as the outcome of elections—cannot be known in advance. Furthermore, any solution requires the participation of countless government, private sector, and nonprofit organizations, as well as a multitude of individual citizens. In these circumstances, emergent solutions will be more likely to succeed than predetermined ones.

Taken from the field of complexity science, “emergence” is a term that is used to describe events that are unpredictable, which seem to result from the interactions between elements, and which no one organization or individual can control. The process of evolution exemplifies emergence. As one animal successfully adapts to its environment, others mutate in ways that overcompensate any process of trial and error, as the powerful but unpredictable way that collective impact works. They have embraced a new way of seeing, learning, and doing that marries emergent solutions with intentional outcomes.

COMPLEXITY AND EMERGENCE

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COLLECTIVE VIGILANCE

It is commonplace to bemoan the insufficiency of resources and solutions needed to address the world’s most challenging problems. As successful collective impact efforts around the world are discovering, however, the problem is not necessarily a lack of resources and solutions, but our inability to accurately see the resources and solutions that best fit our situation.

When each organization views the availability of resources and the range of solutions through the lens of its own particular agenda, the resulting kaleidoscope conceals many opportunities. Collective impact efforts, however, sharpen a community’s collective vision. Having a shared un-
The leaders of successful collective impact initiatives have embraced a new way of seeing, learning, and doing that marries emergent solutions with intentional outcomes.
Continuous feedback depends on a vision of evaluation that is fundamentally different than the episodic evaluation that is the norm today in the nonprofit sector. Episodic evaluation is usually retrospective and intended to assess the impact of a discrete initiative. One alternative approach is known as “developmental evaluation,” and it is particularly well suited to dealing with complexity and emergence.

Developmental evaluation focuses on the relationships between people and organizations over time, and the problems or solutions that arise from those relationships. Rather than render definitive judgments of success or failure, the goal of developmental evaluation is to provide an on-going feedback loop for decision making by uncovering newly changing relationships and conditions that affect potential solutions and resources. This often requires reports on a weekly or biweekly basis compared to the more usual annual or semi-annual evaluation timeline.

The Vibrant Communities poverty reduction initiative in Canada has successfully employed developmental evaluation within their collective impact efforts to help identify emergent solutions and resources. Facilitated by the Tamarack Institute, which serves as a national backbone to this multi-community effort, Vibrant Communities began 11 years ago with a traditional approach to accounting for results based on developing a logic model and predetermined theory of change against which they would measure progress. They quickly discovered that very few groups could develop an authentic and robust theory of change in a reasonable period of time. Often the logic model became an empty exercise that did not fully reflect the complex interactions underlying change. Tamarack then shifted to a more flexible model that embodied the principles of developmental evaluation. They began to revise their goals and strategies continuously in response to an ongoing analysis of the changes in key indicators of progress, as well as changes in the broader environment, the systems of interaction, and the capacities of participants. Although it sounds complicated, such a process can be surprisingly straightforward. The Vibrant Communities initiative in Hamilton, Ontario, for example, developed a simple two-page weekly “outcomes diary” to track changes in impact on individuals, working relationships within the community, and system level policy changes.

Vibrant Communities’ rapid feedback loops and openness to unanticipated changes that would have fallen outside a predetermined logic model enabled them to identify patterns as they emerged, pinpointing new sources of energy and opportunity that helped to generate quick wins and build greater momentum. This approach has provided critical insights—for individual communities and the initiative as a whole—into how interlocking strategies and systems combine to advance or impede progress against a problem as complex as poverty reduction.

We have earlier emphasized the importance of shared measurement systems in collective impact efforts, and they are indeed essential for marking milestones of progress over time. Because most shared measurement systems focus primarily on tracking longitudinal quantitative indicators of success, however, the systems are not typically designed to capture emergent dynamics within the collective impact effort—dynamics which are multi-dimensional and change in real time. As a result, developmental evaluation can provide an important complement to the “what” of shared measurement systems by providing the critical “how” and “why.”

In its Postsecondary Success (PSS) program area, the Bill & Melinda Gates Foundation is also using developmental evaluation to better understand emergent opportunities in the context of complexity. While the PSS is not fully engaging in collective impact, its Communities Learning in Partnership (CLIP) is instilled with the same spirit and many of the requisite conditions for collective impact. The initiative engages diverse stakeholders, including the K-12 educational system, higher education, the business community, political, civic, and community leaders, and social service providers with the goal of increasing post-secondary completion rates among low-income young adults.

The general framework for change for the CLIP work provides guideposts, but is not overly prescriptive. In seeking to improve post-secondary completion rates among low-income youth, grantee communities have been asked to focus on four broad-based levers for change: developing partnerships, using data to inform their strategies, building commitment among stakeholders, and tackling policy and practice change. Yet it is entirely up to the communities, armed with deep knowledge about their local context, to make sense of these four levers and to identify and pursue emergent opportunities for themselves.

The Gates Foundation has retained the OMG Center to perform developmental evaluation to gain greater insight into emerging solutions and to understand what it takes for a community to coalesce around a postsecondary completion goal. This requires near-constant contact. The OMG evaluation team speaks with the technical assistance providers and the foundation program officer every two weeks and reviews documents and data from the grantees sites on a rolling basis. In most cases, OMG has ready access to document sharing websites that grantees have set up to support the partnership. OMG structures interviews to build off of previous conversations and produces a running narrative that documents in detail how the work is unfolding. OMG also connects directly with the grantees and their partners through interviews and site visits every three to four months.

Following every major data collection point, OMG shares a rapid feedback memo with the site, the technical assistants, and the foundation team containing their observations and questions for consideration. OMG shares new analysis and insights nearly every eight weeks, and pairs ongoing assessments with a debriefing call or a reflection meeting. They also hold an annual meeting to review the program’s theory of change, enabling the evaluation, foundation, and technical assistance partners to revise it as emergent opportunities are identified.

This developmental evaluation has allowed the Gates Foundation, OMG, and grantee communities to capture and synthesize an unprecedented level of nuance
about how change happens in a particular community—who needs to drive the agenda, who needs to support it, how they can get on board, and what structures are needed to support the effort. The developmental evaluation has also helped unearth the habitual and cultural practices and beliefs that exert enormous influence on how important organizations and leaders—such as school districts, higher education institutions, and municipal leaders—operate. These informal systems could have been easily overlooked in a more traditional formative evaluation with a more structured framework of analysis.

As vigilant as participating members of a collective impact initiative may be, efforts to identify improvements can be helped by a “second set of eyes” focused on identifying emergent patterns. In the case of CLIP, the added vision afforded through developmental evaluation resulted in significantly improved learning around opportunities and resources, leading to important changes in the actions of key stakeholders.

COLLECTIVE ACTION

Capturing learnings is one thing, acting on them is another. The traditional model of social change assumes that each organization learns its own lessons and finds its own solutions which are then diffused over time throughout the sector. In effective collective impact initiatives, however, learning happens nearly simultaneously among all relevant stakeholders and, as a result, many organizations develop and respond to new knowledge at the same time. This has two important consequences: first, new solutions are discovered that bridge the needs of multiple organizations or are only feasible when organizations work together, and second, all participating organizations adopt the new solution at the same time.

We described the key to this coordinated response in our previous article, “Channeling Change: Making Collective Impact Work,” published in Stanford Social Innovation Review in January 2012, as “cascading levels of linked collaboration.” This structure is currently being used in the majority of effective collective impact efforts we have researched. (See “Cascading Levels of Collaboration” to right.)

When supported by an effective backbone and shared measurement system, the cascading levels of collaboration creates a high degree of transparency among all organizations and levels involved in the work. As the illustration suggests, information flows both from the top down and from the bottom up. Vision and oversight are centralized through a steering committee, but also decentralized through multiple working groups that focus on different levels for change.

Our research indicates that these working groups are most successful when they constitute a representative sample of the stakeholders. This leads to emergent and anticipatory problem solving that is rigorous and disciplined and, at the same time, flexible and organic. Structuring efforts in this way also increases the odds that a collective impact initiative will find emergent solutions that simultaneously meet the needs of all relevant constituents, resulting in a much more effective feedback loop that enables different organizations to respond in a coordinated and immediate way to new information. Similar to the birds in a flock, all organizations are better able to learn what each organization learns, enabling a more aligned, immediate, and coordinated response.

Consider Tackling Youth Substance Abuse (TYSA), a teen substance abuse prevention initiative in Staten Island, New York. The overall goal of this collective impact effort, launched in May of 2011, is to decrease youth prescription drug and alcohol abuse in Staten Island, a community of nearly 500,000 people. The effort is coordinated through a steering committee and one-person backbone organization. There are four working groups: a social norms group focused on changing attitudes and behaviors of youth and parents, a retail and marketplace availability group focused on policies that limit inappropriate purchasing of prescription drugs and alcohol, a continuum of care group focused on developing and coordinating high quality approaches to screening-referral-treatment-and-recovery, and a policy and advocacy group focused on creating a policy platform regarding facets of teen substance abuse.

Stakeholders in the continuum of care working group include representatives from those who treat youth substance abuse disorders (such as hospitals, and mental health and substance abuse providers), those who work with youth who might have or be at significant risk of developing a substance abuse disorder (such as the New York City Department of Probation and drug treatment court), those who work on health protocols (such as the Department of Health) and those who provide counsel to youth (such as the YMCA and Department of Education substance abuse prevention counselors). A key finding emerging from this group’s initial stages of work was that, among treatment providers on Staten Island, there was no consistent screening tool for substance abuse disor-
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In each of these cases, collective vigilance, learning, and action that result from careful structuring of the effort. If the structure-specific steps we have discussed here are thoughtfully implemented, we believe that there is a high likelihood that effective solutions will emerge, though the exact timing and nature cannot be predicted with any degree of certainty. This, of course, is a very uncomfortable state of being for many stakeholders.

And yet staying with this discomfort brings many rewards. The collective impact efforts we have researched are achieving positive and consistent progress on complex problems at scale, in most cases without the need to invent dramatically new practices or find vast new sources of funding. Instead we are seeing three types of emergent opportunities repeatedly capitalized on in collective impact efforts:

- A previously unnoticed evidence-based practice, movement, or resource from outside the community is identified and applied locally.
- Local individuals or organizations begin to work together differently than before and therefore find and adopt new solutions.
- A successful strategy that is already working locally, but is not systematically or broadly practiced, is identified and spread more widely.10

This process of collective seeing, learning, and doing is aptly described by noted author, Atul Gawande, in his book The Checklist Manifesto. Gawande investigated how the construction industry deals with complexity and uncertainty in building skyscrapers. He was amazed to find that the software they use does not itself provide the solution to unexpected problems that arise during construction. Instead, the software merely summons the right people together to collectively solve the problem. For example, if the problem involves electricity, the software notifies the electrician; if the problem is in plumbing, it notifies the plumber; and so on—each person needed to resolve the problem is brought together by the software, but the people themselves figure out the solution.

In his book, Gawande remarks on the irony that the solution does not come from the computer or a single person in authority: “In the face of the unknown—the always nagging uncertainty about whether, under complex circumstances, things will really be OK—the builders trusted in the power of communication. They didn’t believe in the wisdom of the single individual, or even an experienced engineer. They believed in the wisdom of making sure that multiple pairs of eyes were on a problem, and then letting the watchers decide what to do.”

Although the construction industry’s approach has not been foolproof, its record of success in relying on emergent solutions has been astonishing: building failures in the United States amount to only 2 in 10 million. While complex social and environmental problems are very different than complex construction projects, Gawande’s investigation illustrates the pragmatic power in relying on emergent solutions.

**WHEN THE PROCESS BECOMES THE SOLUTION**

We have found in both our research and consulting that those who hope to launch collective impact efforts often expect that the process begins by finding solutions that a collective set of actors can agree upon. They assume that developing a common agenda involves gaining broad agreement at the outset about which predetermined solutions to implement. In fact, developing a common agenda is not about creating solutions at all, but about achieving a common understanding of the problem, agreeing to joint goals to address the problem, and arriving at common indicators to which the collective set of involved actors will hold themselves accountable in making progress. It is the process that comes after the development of the common agenda in which solutions and resources are uncovered, agreed upon, and collectively taken up. Those solutions and resources are quite often not known in advance. They are typically emergent, arising over time through collective vigilance, learning, and action.

Further investigation yielded the fact that a number of organizations working with youth at significant risk of developing a substance abuse disorder, such as probation, did not use a screening tool at all. Remarkably, pediatricians were also among the population of providers who had no consistent protocol for substance abuse screening and referral.

This led the continuum of care workgroup to identify an evidence-based screening tool approved by the local and state health agencies that quickly assesses the severity of adolescent substance use and identifies the appropriate level of treatment. The workgroup felt that this tool, called the CRAFFT, if used on Staten Island more widely, would lead to more system-wide intervention and referrals for assessments and treatment services for youth with substance use disorders, as well as those at risk of developing disorders.

At the same time, the social norms group was looking for a way that coaches, parents, and other people who came in contact with youth outside of formalized systems could better assess substance abuse. Through the cascading collaborative structure, the backbone organization and steering committee had a window into the activity of all work groups, enabling each of them to understand the needs of the others. Although there was a universal need to improve screening and referral, the diverse populations required different approaches. Specifically, youth counselors in both work groups agreed that the CRAFFT tool was too technical for use by non-clinicians. As a result, TYSA is moving forward by having the continuum of care workgroup roll out the use of CRAFFT with all professionals, including probation officers, pediatricians, adult and family doctors, school counselors, hospitals and emergency rooms, and child welfare providers.

Simultaneously, the social norms group is rolling out an evidence-based training program that educates coaches, parents, and other people who are in constant contact with youth in how to recognize the signs and symptoms of substance abuse and problem behavior, what questions to ask when having a conversation with youth about their drug or alcohol use, and arms them with the available resources to refer someone who they feel may be displaying such behaviors. The solution reached in this case was not one anticipated at the outset by TYSA steering committee members of the initiative. The rules for interaction, however, ensured that all participants were able to see each other’s needs and act together, simultaneously agreeing on a pair of emergent solutions that serve the community far better than existing approaches implemented by any one organization or individual.

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Covers existing solutions and resources that have not been previously employed. In a world where breakthrough innovations are uncommon and resources are scarce, the opportunity to achieve greater social progress at a large scale with the tools already available is well worth the discomfort of shifting from predetermined to emergent solutions.

Effective collective impact efforts serve one other important function as well: providing a unified voice for policy change. Vibrant Communities reports that numerous changes in government policies related to housing, transportation, tax policy, child care, food security, and the like have resulted from the power of alignment across sectors that results from the disciplined, yet fluid structuring, of collective impact efforts. In our own experience working with the Juvenile Justice system for the State of New York, a twelve-month collective impact effort to establish an initial common agenda was able to produce clear policy recommendations that have since been signed into law. As our political system increasingly responds to isolated special interests, the power of collective impact to give political voice to the needs of a community is one of its most important dimensions.

SHIFTING MINDSETS

To be successful in collective impact efforts we must live with the paradox of combining intentionality (that comes with the development of a common agenda) and emergence (that unfolds through collective seeing, learning, and doing). For funders this shift requires a different model of strategic philanthropy in which grants support processes to determine common outcomes and rules for interaction that lead to the development of emergent solutions, rather than just funding the solutions themselves. This also requires funders to support evaluative processes, such as developmental evaluation, which prioritize open-ended inquiry into emergent activities, relationships, and solutions, rather than testing the attribution of predetermined solutions through retrospective evaluations.

Such a shift may seem implausible, yet some examples exist. We earlier mentioned that the Gates Foundation is using developmental evaluation to support an effort that provides broad latitude for grantees to identify emergent strategies. The Gates Foundation’s Pacific Northwest Division has made a similar shift by supporting the infrastructure for collective impact education reform in nine south Seattle communities. And the Greater Cincinnati Foundation, a key initial champion of the Strive “cradle to career” collective impact education effort in Cincinnati and Northern Kentucky, is now supporting the development of shared community outcomes and backbone organizations in four additional program areas: workforce development, early childhood, community development, and economic development.

CURIOSITY IS WHAT WE NEED

At its core, collective impact is about creating and implementing coordinated strategy among aligned stakeholders. Many speak of strategy as a journey, whether referring to an organization, a career, or even raising a family. But we need to more fully confront what happens on the journey. Some days we will move quickly as planned, other days we may find our way forward unexpectedly blocked. We will meet new people and develop new ideas about our purpose, and even the coordinates of our destination. Going on a journey is a complex undertaking. Often, the best course of action is to make sure we are closely watching what’s happening at each stage of the way. As Brazilian author Paulo Coelho remarked “When you are moving towards an objective, it is very important to pay attention to the road. It is the road that teaches us the best way to get there, and the road enriches us as we walk its length.”

Complexity theorists believe that what defines successful leaders in situations of great complexity is not the quality of decisiveness, but the quality of inquiry. As organizational behavior guru Margaret Wheatley puts it, “we live in a complex world, we often don’t know what is going on, and we won’t be able to understand its complexity unless we spend more time not knowing... Curiosity is what we need.”

Collective impact success favors those who embrace the uncertainty of the journey, even as they remain clear eyed about their destination. If you embark on the path to collective impact, be intentional in your efforts and curious in your convictions.

3 The notion of capitalizing on emergent solutions, rather than testing the attributes of predetermined solutions, has been developed under existing constraints, rather than just funding the solutions themselves. This also requires funders to support evaluative processes, such as developmental evaluation, which prioritize open-ended inquiry into emergent activities, relationships, and solutions, rather than testing the attribution of predetermined solutions through retrospective evaluations.
4 The risk factor of Poor Family Management dropped by 19 percent and Parental Attitudes Favorable to Substance Use decreased 12 percent. See FSG blog by Kat Allen, co-chair, Communities That Care Coalition of Franklin County and the North Quabbin.
5 From Frances Westley, Brenda Zimmerman, and Michael Patton, Getting to Maybe: How the World is Changed, Second Edition, Berrett-Koehler, 2010. Taken from the FSG blog by Kat Allen, co-chair, Communities That Care Coalition of Franklin County and the North Quabbin.
6 Developmental evaluation is a term coined by the organizational consultant and program evaluator Michael Quinn Patton in the early 1990s.
7 Developmental evaluation is a term coined by the organizational consultant and program evaluator Michael Quinn Patton in the early 1990s.
8 Hallie Preskill and Tanya Beer, Evaluating Social Innovation, Center for Evaluation Innovation.
9 Preskill and Beer, Evaluating Social Innovation.
10 The notoriety of capitalizing on emergent solutions that come from within has been compellingly depicted by authors Richard Pascale, Jerry Sternin, and Monique Sternin in their book, The Power of Positive Deviance, Harvard Business Review Press, 2010. The authors share provocative examples of “positive deviants” who live and work under the same constraints as everyone else, yet find a way to succeed against all odds. Because the solutions have been developed under existing constraints, they can be applied more broadly by others living and working in the same community without the need for incremental resources.