CHANGE MANAGEMENT FRAMEWORK

The Rennie Center launched the Massachusetts Teaching & Learning Network (MassTLN) initiative as a hub for three implementation networks to improve local educator effectiveness. The Rennie Center developed the *Change Management Framework* (CMF), a rigorous and structured approach to planning and implementing district and school improvement strategies

The CMF highlights a number of specific areas of focus, including: identification of a clear and actionable problem of practice; investigation of the evidence base, including conducting original research to unearth and evaluate best practice; engaging education leaders and practitioners to understand local challenges and build on-the-ground support through committed and trusting teams; and pursuing continuous, result-oriented testing of improvement strategies to assess progress over time and take corrective action as needed. This work is accomplished through the formation of networked improvement communities supported by Rennie Center staff and designed to facilitate peer learning, establish shared accountability, and enable scaling through demonstrations of success across diverse learning settings.



The Rennie Center's CMF is aligned with the six core principles of improvement research developed by the Carnegie Foundation for the Advancement of Teaching and informed by other leaders in the field including the Billions Institute, the Education Delivery institute, the Institute for Healthcare Improvement, and Judge Baker's Children's Center. One unique and critical aspect of Rennie's approach is an explicit emphasis on creating school-based cultures that embrace change to support structured planning processes. Trainings in interest-based practice and collaboration complement more conventional improvement approaches to help build local capacity and sustain work well beyond the duration of individual investments and projects.



THE WHAT: DEFINING THE PURPOSE OF IMPROVEMENT		
CORE ELEMENTS COMPONENTS		
1. IDENTIFY A SHARED PROBLEM OF PRACTICE (POP)	Identify challenges and causes of the problem of practice (PoP) through collective and systematic analysis led by practitioners.	
	Determine an inter-related set of hypotheses about key drivers for improvement.	
	Build ownership and buy-in around PoP from practitioners and key stakeholders responsible for executing and managing drivers for improvement.	
2. ESTABLISH PROJECTED OUTCOMES FOR BENEFICIARIES	Determine quantifiable impact measures that are specific, assignable, demonstrable, measurable and time-bound.	
	Design process and benchmarks /indicators for assessing progress against desired impact.	
	Establish verification mechanism using valid data collection tools.	
3. DETAIL NATURE OF POTENTIAL INTERVENTION(S)	Build a common understanding of the socio-political-cultural context in which the implementation team will	
	operate.	
	Specify programmatic components rooted in research-based best practices.	
	Design strategies that can be led by practitioners in well-supported learning communities to coordinate and achieve improvement practices.	

THE HOW: DETERMINING THE METHODS FOR ACHIEVING IMPROVEMENT GOALS		
CORE ELEMENTS	EMENTS COMPONENTS	
1. Build a committed and trusting team	Guarantee that PoP is a shared priority among team members.	
	Agree on individual and organizational roles and responsibilities.	
	Ensure diversity of practitioners and stakeholders to guide improvement processes.	
	Establish, and continuously evaluate, norms of behavior and accountability.	
	Create safe space for team interactions where learning is the goal.	
2. ESTABLISH EFFECTIVE OPERATIONS	Provide adequate time, financial investment, human capital, and infrastructure resources for effective	
	operational management.	
	Delineate communication protocols to build and increase a shared knowledge base and support learning	
	environment.	
	Develop results-oriented work-plan including specific actions and timeframes.	
3. SUPPORT SYSTEMATIC AND CONTINUOUS LEARNING	Establish timeframes, methodology and protocols/instruments for testing.	
CYCLES	Conduct multiple, iterative testing cycles.	
	Continuously assess learnings derived from testing until change can be deemed an improvement.	



THE WHAT: DEFINNG THE PURPOSE OF IMPROVEMENT				
CORE ELEMENTS	COMPONENTS	QUESTIONS		
1. IDENTIFY A SHARED PROBLEM OF PRACTICE (POP)	Identify challenges and causes of the problem of practice (PoP) through collective and systematic analysis led by practitioners.	Well-developed PoP tools represent the implementing team's working theory of the potential inputs that resulted in the shared problem. A team of practitioners must: • Identify common factors and causes that result in the shared problem. • Collectively prioritize a targeted PoP. • Establish evidence verifying the existence of the PoP.	 Have all members had the opportunity to express their unique challenges of practice? Has the team identified common themes and priorities among the challenges? Has the team clearly identified and mapped the root causes of the PoP? Has the team established the qualitative and quantitative evidence of the identified causes? 	
	Determine an interrelated set of hypotheses about key drivers for improvement.	 A common definition of a PoP allows groups to construct an inter-related set of hypotheses and strategies about how to address the causes of the shared PoP. A team of practitioners must: Clearly define potential key drivers or areas where change will impact the overall aim. Directly link and clearly define the assumed cause and effect relationship to the PoP (using language like "improve" or "decrease") to differentiate the essential and non-essential factors. Determine whether the essential drivers are primary, secondary, or tertiary. Decide which interventions, actions, and strategies most efficiently and effectively address the key drivers. 	 Has the team defined key drivers to address the PoP? Has the team evaluated what key driver(s) have the most potential impact to address the PoP? Has the team differentiated if the determined key drivers act independently or in concert with each other to achieve the overall goal? 	
	Build ownership and buy-in around PoP from practitioners and key stakeholders responsible for executing and managing drivers for improvement.	To build a model of improvement, a team of practitioners must articulate and coalesce around a shared PoP. The identification of the problem (and the improvement efforts) must be practitioner driven. A well-developed model includes: • Agreement on the improvement theory developed around causes and drivers of the PoP. • An articulation of the shared PoP by using common language and considering the local context. • Established and continuous ownership among key practitioners, leading the identification, analysis, and implementation improvement efforts.	 Has the team developed and agreed on an actionable PoP? Does the team use consistent language when talking about the shared PoP? Do practitioners maintain a key and vital role in the ongoing improvement efforts (identify, analyze, and implement)? Are practitioners' owners of the improvement effort? 	



2.	ESTABLISH
	PROJECTED
	OUTCOMES
	FOR
	RENEFICIARIES

Determine quantifiable impact measures that are specific, assignable, demonstrable, measurable and timebound.

The improvement action must determine what the desired impact is and whether progress towards desired impact is measurable. Thus, an improvement team must develop and define quantifiable outcomes that can measure progress towards the determined improvement aim and ensure that it aligns with the PoP. A good measure moves from such terms as "capacity building" and "networking" to analyzing "gains" that come from the process or activities. Good impact measures:

- Represent a significant and specific change in behavior or condition.
- Are objectively measurable and verifiable.
- Are attainable within the sphere of influence of the improvement team.
- Are achievable by the improvement team within a realistic timeframe.
- Establish a baseline and determine when success will be achieved.

Does the team have impact measures that are:

- Specific, clear and easy to understand?
- Quantifiable, objective and measurable?
- Within the **area of influence** of the improvement team?
- Plausible and realistically achievable by the team?
- · Relative to a pre-established baseline?

Design process and benchmarks/indicators for assessing progress against desired impact.

Once a team specifies and negotiates internally (with staff) or externally (with partners) the beneficiary-focused outcomes, it is crucial to develop milestones/steps to reach the desired impact. These indicators help a team draw learnings when analyzing progress to the desired result. By establishing indicators, progress can be tracked and corrective actions initiated based on implementation practice. Teams should ensure that the data that is collected is:

- Well understood to quickly determine what it represents.
- Frequently collected to allow for an analysis of lessons learned.
- Consistent over the course of time to allow teams to detect seasonal variations.

- Has the team broken the PoP into actionable, attainable, and progressive accountability benchmarks?
- Are the determined benchmarks truly an indicator of progress toward the intended outcome?
- Are the benchmarks specific and time-bound, to ensure that data collected represents a clear understanding of progress?

Establish verification mechanism using valid data collection tools.

An effective improvement team must prepare to verify recorded results using valid measurement techniques and improvement data to assess meaning. Verification here alludes to the "How do you know" question and what are the ways the team will prove that they have achieved the outcomes and indicators. Verification typically focuses on milestones (e.g., performance towards targeted accomplishments) and serves to provide solid information for

- Has the team developed a shared and consistent strategy to measure the accountability benchmarks?
- Has the team determined data measuring mechanisms – data collection systems – that allow for the realistic collection of data by the team in a timely manner?



_	Rennie Center Change Management Framework			
			 subsequent evaluation. Valid verification data sources should: Be as simple as possible to collect "just enough data" that is relatively easy to obtain. Establish that something represented does indeed take place. 	Has the team developed a process to gather data frequently to check in on the status of the improvement efforts?
	DETAIL MATURE	Puild a common	An effective implementation or improvement program must	
	OF POTENTIAL INTERVENTION(S)	Build a common understanding of the socio-political-cultural context in which the implementation team will operate.	An effective implementation or improvement program must be led by practitioners but also sanctioned and supported by all stakeholders. Support must be continuously vetted and reaffirmed as improvement efforts are implemented. An improvement effort does not operate in a vacuum, thus a continuous check in with the political climate is vital to sustained improvement. To identify the socio-political-cultural context in which the program will exist, an implementation team must: • Identify and solicit input from internal and external stakeholders (e.g., personnel, organizations) in the local context though valid methods such as surveys and focus groups. • Understand the local climate and the potential political challenges that can put pressure on the improvement model. • Identify, vet, and map competing priorities and reform efforts that can affect the course or efficiency of the improvement project.	 Has the team identified potential opponents or proponents and any potential competing priorities that may detract from the improvement effort? Has the team gauged the feasibility and sustainability by analyzing the implementation environment and developed a plan to navigate the local context? Has the team established a process to consistently check in and gather feedback from stakeholders and decision makers to continue making the PoP a priority and get support from them?
		Specify programmatic components rooted in research-based best practices.	An effective framework for achieving improvement aims should be rooted in applying proven best practices within the local context through systematic testing and consideration of what works, for whom, and under what set of conditions. Improvement science is not about discovering new ideas but about contextualizing already proven practices and implementing them. A team of practitioners must consider: Relevant empirical research and subject-matter expertise, and professional experience pertaining to the PoP. Data of best practices from the local context through interviews, focus groups, and surveys. Formulate locally driven programmatic components that are supported and driven by both external empirical research and local best practices.	 Has the team gathered relevant research to support and influence their potential intervention(s)? Has the team investigated what practitioners are currently doing around the shared PoP? Are the programmatic efforts developed with a consideration of both research and local context? Has the team confirmed that the selected strategies are best practices/ proven to work somewhere else?



Design strategies that can be led by practitioners in wellsupported learning communities to coordinate and achieve improvement practices. Effective improvement programs rely on best practices and well-defined learning communities to design strategies to gradually build solutions to identified problems. To implement an effective improvement program, teams should consider strategies that:

- Enable structures to allow teachers to primarily drive collaboration,
- Develop processes for teachers who have similar learning goals, using formal structures to collaboratively plan & analyze data, and
- Establish a plan that aligns teacher professional development and growth with learning goals.¹

- Has the improvement team designed the infrastructure to empower educators to lead the effort?
- Has the team developed the necessary subgroups, space and time to carry out the collaborative work?
- Has the team of teachers collaboratively codified their action plan to align with their professional learning goals and do they see their participation in the improvement effort as beneficial?

¹ The Key Elements of School Communities was developed by the Rennie Center study team based on a synthesis of teacher collaboration research literature. Teacher and leader behaviors were sorted into categories based on commonly-held characteristics of collaborative school communities existing in the research literature. http://www.edvestors.org/wp-content/uploads/2016/05/EdVestors-Making-Space-The-Value-of-Teacher-Collaboration-2014.pdf



THE HOW: DETERMINING THE METHODS FOR ACHIEVING IMPROVEMENT GOALS			GOALS
CORE ELEMENTS	COMPONENTS	HOW	QUESTIONS
4. BUILD A COMMITTED AND TRUSTING TEAM	Guarantee that PoP is a shared priority among team members.	Research into effective implementation shows that identification and definition of a PoP must be supplemented by agreement among reformers that it is a shared priority. An effective team ensures that: •All team members believe that the defined PoP best represents the entire team's needs and interests. •The team has developed an agreement (e.g. codified by a mission statement and/or MOU) that clarifies organizational commitments necessary to orient work and achieve the desired improvement. •The team is committed to ensuring that the work can be sustained and survive changes in internal and external conditions (e.g. changes in management, shifts in demographics, introduction of new initiatives).	 Do all members agree that the chosen PoP is better than any alternative PoP for the group to focus on? Is the mission visible and can all members articulate the mission? Has the team discussed anticipated challenges and/or developed a process to prepare for unanticipated changes based on the local context?
	Agree on individual and organizational roles and responsibilities.	Teams need clear agreements to set governance responsibilities and team objectives, define membership structures and functions, and establish communication protocols and schedules. An organized team ensures the following: •All members of the team have a clear understanding of their individual responsibilities and the overall team objectives. •The team has membership structures, functions, and established communication protocols and schedules to support their work. •The specific roles and responsibilities of each member are vital to the improvement efforts.	 Do members of the team understand their individual role in relation to the overall goal the project? Are appropriate structures in place to sustain and support regular activities? Do all members of the team have clarity on what is expected of them throughout the duration of the project?
	Ensure diversity of practitioners and stakeholders to guide improvement processes.	The team, in context of the socio-political environment, brings together a core group of diverse stakeholders to address: •The need to assemble diverse expertise and skills, •The need to include community representation where the action will occur, and •The need to assemble diverse organizational roles to represent all interests.	 Is the team composed of people that have the appropriate skills necessary to achieve the goal? Is the team representative and reflective of the community where the need exists (e.g. race, gender, socioeconomics)? Is the team composed of people in a variety of relevant and different roles?



Rennie Center Change Management Framework Establish. and Norms and protocols provide a common foundation among • Are the meetings effective and how continuously evaluate. team members for building accountability frameworks. does the team know? Do all members Effective norms successfully ensure that: norms of behavior and of the team know what is expected of • The team has collaboratively developed norms and accountability. them? protocols that are effective in providing guidelines for Are all members held accountable for logistics, facilitation, and scheduling, among other points of their work/contribution? focus. Do all team members manifest going · Norms and protocols provide a common foundation among beyond compliance and show true team members for building accountability frameworks (e.g. investment? attending PD training, timely data reporting, etc.). • Through clear and transparent processes, the team can come to agreed-upon understanding of expected behaviors. Create safe space for Creating a safe space for interactions among team members is • Has the team created a space where team interactions predicated on the capacity to develop trust. With trust, an open people report feeling welcome and and effective idea exchange is possible, thereby facilitating a where learning is the valued? culture of innovation and learning. A team must consider its goal. • Is the rate of team interactions ability to generate a space that: adequate for the team to develop • Develops a safe, productive, and creative space for effective relationships? interactions among team members where ideas, not people, Are team members fully engaged and are challenged and discussed. do they attend meetings with the intent • Establishes familiarity through meaningful interactions. to learn? • During team functions, all team members genuinely listen. consider other's ideas, and are fully "present". Provide adequate Effective operations require both adequate financial and 5. ESTABLISH Does the team have the IT time, financial human resources to bolster a strong infrastructure. **EFFECTIVE infrastructure** to sustain and complete investment, human Implementation teams are often comprised of individuals **OPERATIONS** the project and share learning? drawn from different organizations (or departments and levels capital, and • Does the team have the funding to infrastructure within the same organization) or organizations located in sustain and complete the project and resources for effective different geographical areas. Teams must consider the share learning? following essential resources to effectively operate and ensure operational • Does the team have the appropriate programmatic success: management. and necessary personnel to sustain Adequate Information Technology (IT) infrastructure to and complete the project and share coordinate, filter, amplify, and share learning. Adequate funding to invest and sustain projects through learning? completion. Adequate time allotted for personnel in charge of

establishing and maintaining a strong infrastructure.



work

ge Management Framev Delineate communication protocols to build and increase a shared knowledge base and support learning environment.
Develop results- oriented work-plan including specific actions and timeframes.

Intentionally linking communication protocols to innovation activities may help create transparent feedback processes. leading to a more hospitable learning environment for team members and the larger community. Strong communication strategies are predicated by the:

- Development of an internal communication protocol using shared language and/or terms to increase team transparency and effectiveness.
- Mutually agreed upon external language to use with the public to share insights, discoveries, and lessons learned.
- By the establishment of a knowledge management (KM) schedule and platform(s) (e.g. webinars, newsletters, conferences, etc.) to ensure community building, knowledge sharing, improvement sustainability and potential for scaling.

- Does the team talk about the implementation project using the same terms, theory of change, and other relevant language?
- Does the team have a process/plan to share learning amongst the network and publicly?
- Does the team have a designated individual(s) responsible for KM activities and is knowledge management integrated into the team's day-to-day operations and regular service delivery?
- Does the team share relevant information and current knowledge across all levels of participation and does the team find these valuable?

A work-plan helps identify key tactics to organize daily operations towards an improvement effort. A tool (e.g. Action Plan, Process Map, Run Chart, or Solution System) is developed to outline and visualize specific actions or strategies that an improvement team will undertake to achieve its goals. A strong tool does the following:

- Coordinates implementation activities.
- Develops a project timeline, deadlines to be met, the milestones or growth targets expected to be achieved at specific stages by appropriate personnel to complete the task.
- Has the team developed a coordinated comprehensive outline inclusive of all implementation activities?
- Does the team have the appropriate members to complete given tasks?
- Does the team have a process / strategy for potentially replacing team members if needed (e.g. someone moves on from the org.)?

6. SUPPORT SYSTEMATIC AND CONTINUOUS LEARNING CYCLES

Establish timeframes. methodology and protocols/instruments for testing.

A systematic methodology must be established to integrate, sustain, and scale-up interventions for teams to benefit from sharing expertise and regularly analyzing data. Thus, teams must develop/select instruments and protocols toward three objectives:

- Sustainability of the improvement system:
- Fidelity of implementation (correspondence between practice and program theory).
- Adherence to intended change practice by all practitioners.

Following predetermined protocols and consistent data collection, does the team have and use appropriate tools and resources that test the strategies used to address their PoP in regards to its:

- Long term sustainability
- **Fidelity** of implementation
- Adherence by all practitioners



	conduct multiple, rerative testing cycles.	Effective improvement programs are designed around a commitment to a rigorous, continuous and lengthy test-and-measurement inquiry. A successful improvement network is skilled at acquiring knowledge and modifying their behavior to reflect new expertise. To ensure the principles of improvement science are met by the team, the team must establish the following: • A clear timeline and plan to rapidly test change. • The necessary tools and strategies to complete test cycles with fidelity. • Investment in the necessary professional development needed (e.g. conferences, webinars, other resources) to ensure the team understands the principles of improvement science and data to support improvement.	 Has the team purposefully planned rapid test cycles aligned with their PoP? Has the team invested in a collective understanding of improvement science, the process of disciplined inquiry, by all members relative to their PoP? Can teachers test the strategy and have any barriers to doing so been addressed?
le te ca	continuously assess earnings derived from esting until change an be deemed an approvement.	Once teams begin rapid testing, they need to be aware of the conditions in which people learn and how to ensure continuous learning amongst practitioners. A systemic improvement action aspires to make changes throughout a defined system and among all stakeholders. Teams must review progress toward intermediary benchmarks to identify any variations from predictive behavior as they may be indicative of problems with the overall improvement plan. To ensure improvement leads to systemic learning and scaling, the team must ensure that all practitioners have: • The opportunity and support to implement the suggested strategy. • The space to reflect and explore on their implementation effort(s) and gauge the impact of the intervention based on the original baseline. • The ability to analyze improvement data to explore lessons learned and discover how to refine for further use. • The opportunity and support to apply or test their altered change theory and extend what they have learned.	 Do teachers have an established community, with predetermined frequent reflection points to constantly evaluate their intervention(s) in a timely manner (e.g. alignment of original intent, analysis of course corrections)? Do teachers have the space and time to re-implement/re-test their strategy based on their findings? Do teachers have an established process and place to collect lessons learned? Do teachers have an established process and place to collect course corrections to avoid repeating things that didn't work?

