



Framing Strategies to Build Understanding of Improvement Science

Framing Brief | FrameWorks Institute

This brief lays out an evidence-based approach to explaining improvement science and networked improvement communities, so that more policymakers and practitioners understand and support these approaches. It touches on (1) existing attitudes and conceptions that shape interpretations of these topics, (2) a set of key concepts to advance across communications, (3) specific communications techniques that have been shown to expand people’s thinking about improvement science and networked improvement communities, and (4) communications themes that improvement science proponents should avoid.

To expand improvement science, improvers need to reach key constituencies.

Improvement science is a new paradigm for research and development in education that promises to be a powerful driver of improvement for the nation’s schools and colleges. A growing body of research suggests that the combination of rigor and flexibility that characterizes improvement science makes it perfectly suited to addressing complex challenges in our education system. In addition, researchers affiliated with the Carnegie Foundation for the Advancement of Teaching have found that networked improvement communities (NICs) are critical to leveraging the power and potential of improvement science to solve educational problems. By institutionalizing processes of continuous and collaborative learning, NICs offer a way to apply improvement science consistently and continuously.

Yet because neither human cognition nor human systems are readily shifted by facts alone, even a strong and growing body of evidence behind improvement science is likely to be insufficient to make the case for this approach to education reform. At times, improvers have struggled to convince educational practitioners or policy stakeholders of the value of improvement science and the power of networking, leaving the possible benefits of these approaches unrealized. To change this dynamic, the field of improvers needs a shared and strategic approach to advancing a set of core ideas that are essential to understanding and appreciating improvement science. Understanding this, the Carnegie Foundation for the Advancement of Teaching engaged the FrameWorks Institute to conduct a Strategic Frame Analysis®, an approach to communications research that draws on the social and cognitive sciences. FrameWorks’ empirical, multi-method investigations arrive at reliable, research-based recommendations for reframing a social issue.

This memo summarizes the key recommendations and offers a set of framing priorities, strategies, and frame elements (or themes) for the field of improvers. This is an “open source” strategy, and we hope it will be used to inform the strategic communications undertaken by the improvement field’s many different leaders, organizations, and programs. If you use communications to make the case for improvement science, the evidence-based insights here will be useful to you. You won’t find a catchy slogan here, but you will find guidance that helps you work more intentionally to advance the conversation about improvement science with policymakers and education practitioners.

If improvers focus on explaining a few core concepts, together, we can build better and broader understanding of our work.

A clear sense of communications goals is essential to any effective plan for engaging and informing the public about a social or scientific issue. In addition to deciding on traditional communications metrics like reach, it is critical to articulate the desired *conceptual* outcomes of the field’s communications efforts. A Strategic Frame Analysis therefore begins with distilling the expert consensus on the “big ideas” that key audiences need to know to become more informed decision-makers and better equipped to engage in a productive dialogue about the proposals advanced by issue proponents.

Based on a comparison of the important characteristics of improvement science and the existing ways that policymakers and education practitioners think about improvement in education, FrameWorks recommends that the field take every opportunity to emphasize the following themes and ideas:

- ***Scientific problem-solving approach:*** Improvement science involves an objective, methodical, and systematic approach to improving practice in education.
- ***Rigorous, but not rigid:*** In improvement science, researchers work with practitioners to select methods and data that will lend reliable and meaningful insight to the problem at hand.
- ***NICS offer a way to integrate improvements into, and across, systems.*** Networked improvement communities offer a sound, replicable way to solve the “scalability” problem that often stymies the spread of innovation in education.
- ***Some things borrowed, some things new:*** Improvement science and NICS build on ideas that have a long history and a great deal of evidence behind them, but they also offer new and distinct contributions that can help education “get better at getting better.”

If the improvement science community begins to think of these conceptual priorities as “learning objectives” for the constituencies we seek to engage, and our communications and outreach efforts as our teaching practice, the field stands a much better chance of building wider, deeper, and broader understanding of the potential of the paradigm.

We can anticipate and navigate our audience(s)’ patterns of thinking.

The concepts outlined above won’t necessarily speak for themselves; they require translation. This is because educational practitioners and policymakers bring their prior assumptions and beliefs to thinking about continuous quality improvement. In many cases, these understandings run counter to the messages that improvers wish to convey.

With a systematic assessment of how the targeted audiences’ thinking differs from expert views, improvers are better equipped to select tactics and techniques for shifting and expanding thinking.

FrameWorks analyzed data taken from interviews and small-group discussion sessions with two types of typical audiences for improvement science advocacy: education practitioners and education policy experts. (Although data from these two groups were collected separately, the analysis showed that their assumptions overlapped frequently. Where these groups differed in their baseline thinking, the distinctions are noted.)

Some of the most important patterns of thinking uncovered through this research are described below. Many are likely to be highly recognizable to anyone who has experience trying to explain or advocate for improvement science and networked improvement communities. The findings are organized as answers to a series of questions that help to establish the fundamental contours of the topic: How can education be improved? What is improvement science? What are networked improvement communities? How can these approaches be used to improve education?

Communications Challenge #1: How can education be improved?

Professionals who are deeply familiar with improvement science define it as an objective approach to continuous quality improvement that relies on rigorous methods and different forms of empirical evidence to guide the identification, development, assessment, and refinement of interventions. Education practitioners and policy experts start in a different place—or more accurately, two different places. Both groups toggle between two different models for what it means to go about “improving” education.

Objective Learning Model	Subjective Individual Experience Model
<p>The <i>Objective Learning</i> model holds that common standards can be applied across contexts, but must be adjusted to specific contexts. When reasoning from this model, people assume that objective data is a critical way to tell whether the universal idea is being implemented well in the specific context. This model also assumes that the data sources must be adjusted, as different forms of evidence are needed to understand different aspects of education, and educators must “use what fits.”</p> <p>The <i>Objective Learning</i> model is productive because it helps people recognize the importance of empirical data and methodical analysis, yet allows room for the selection of data sources that are appropriate to the question at hand.</p>	<p>The <i>Subjective Individual Experience</i> model involves the assumption that educational quality is wholly individualized and that improvement is highly contextual and particular—to the point that generalizations cannot be made across contexts. When reasoning from this model, people assume that improvement occurs through inquiry into subjective experiences. For instance, practitioners may think about their practice and change their interactions with students or other practitioners. This model is unproductive, as it excludes the type of objective inquiry that characterizes improvement science and leads to skepticism that improvements in one location or domain can be applied to other contexts.</p>

Both groups (policy stakeholders and education practitioners) held both models. However, practitioners tended to draw on the *Subjective Individual Experience* model more consistently, and the *Objective Learning* model was less prominent in their thinking. Policy stakeholders toggled between *Subjective* and *Objective*. An effective communications strategy must find ways to cue the *Objective Learning* model and suppress the *Subjective Individual Experience* model.

Communications Challenge #2: What is improvement science?

Proponents of improvement science note that its characteristics and principles distinguish it in important ways from other approaches to improvement. In contrast, policy stakeholders and practitioners draw on assumptions that lead them to think this approach is “nothing new.” Both groups focus on the similarities of improvement science with other approaches. FrameWorks researchers characterized these mental models as *Already Doing It* and *Just One Tool in the Toolkit*:

<i>Already Doing It Model</i>	<i>Just One Tool in the Toolkit Model</i>
<p>This model involves the thinking that improvement science is simply a different name for methods that are already in use. Participants assimilated improvement science into their previous experiences with continuous improvement approaches, even though these approaches typically lacked core features of improvement science—namely, its focus on rigorous and scientific processes of learning.</p>	<p>This model involves the thinking that improvement science is just one of many approaches that schools could adopt. This understanding prevents the recognition of improvement science as an overarching approach that can be used to integrate and synthesize findings from different types of methods. Policy stakeholders assumed that improvement science is an alternative to randomized control trials. Practitioners assumed it was mainly designed for use in the classroom. Neither group thought of improvement science as an approach that could be applied at multiple levels of education.</p>

As explained below, communications shouldn’t attempt to “debunk” incorrect or unproductive patterns of thinking or explicitly argue against them. A more effective course is to navigate around them: Avoid using cues that activate them and, instead, use framing strategies that activate other, more productive ways of thinking.

Communications Challenge #3: What are NICs?

Improvers think of Networked Improvement Communities as carefully structured and rigorous problem-solving tools. FrameWorks research found that neither policy stakeholders nor practitioners were familiar with NICs and that many participants had never heard the term. When these audiences were provided with a brief definition of NICs, both groups focused on the interactive and collaborative aspects of NICs, which cued subjective, rather than objective, understandings of improvement. For instance, many

practitioners assumed that NICs function like the “professional learning communities” with which they were already familiar.

The “cognitive hole” around NICs represents a communications challenge because people fill in definitional blanks themselves, and rarely in such a way that matches expert understanding. A framing strategy for NICs needs to include effective ways to point audiences to their most important and most distinctive characteristics.

Communications Challenge #4: How Can the System Support Improvement?

FrameWorks Institute research suggests that support for improvement science and NICs will be constrained by a deep fatalism about education improvement. Both policy stakeholders and practitioners assume that the systematic reforms that improvers propose are unlikely to be enacted. This fatalism stems from several interrelated models held by these groups.

- **Education Improvement Is Driven by Fads, Not Evidence.** Policy stakeholders view the culture of education as generally hostile to scientific evidence and subject to “fads,” where new ideas and pedagogies are enthusiastically taken up and then quickly discarded before success is possible. This model creates persistent skepticism about the possibility of improving quality at a wide scale.
- **Vested Interests Block Reform.** Stakeholders and practitioners both assume that various groups involved in education have a vested interest in the status quo. These groups, such as elected school boards, teachers’ unions, and parents, benefit somehow from current practice or policy and are therefore resistant to change. When reasoning from this model, educators see improvement as difficult, and perhaps impossible, to achieve.
- **Limited Resources=Limited Improvement.** Both stakeholders and practitioners assume that a major challenge to quality and improvement is limited resources. This model involves the belief that resources—and particularly money—are distributed unevenly between schools and districts. As a result, many communities cannot invest in teacher development, teacher recruitment, or infrastructure and materials for classroom and beyond-the-classroom learning. This leads to fatalism about systemwide improvements, because standardization across contexts seems impossible.
- **Overwhelmed Teachers Can’t Improve.** Practitioners assume that teaching takes a large psychological and emotional toll on educators, and that teachers are overwhelmed by the everyday demands of their roles. When reasoning from this model, practitioners view improvement efforts as likely to fail because teachers have neither the time, the emotional energy, nor the cognitive bandwidth to engage meaningfully in large-scale improvement efforts.

Together, these models conspire to produce a deep sense of fatalism about improvement science and NICs, making improvers’ desired reforms seem like nice but impracticable ideas at best, and foolhardy at

worst. Generating support for the measures needed to build capacity for improvement science and NICs will require strategies for overcoming this fatalism.

Tested themes allow the field to coalesce around a common language.

Given that policy stakeholders and education practitioners lack productive ways of thinking about improvement science, what are effective ways to talk about this type of work? Through a carefully designed series of studies, FrameWorks found several frame elements, or themes, that were demonstrably effective in communicating the priority concepts outlined above and in boosting these audiences' understanding and support for improvement science and NICs. Three of these themes are outlined here.

- 1. To ward off fatalism, elaborate on the theme of *Progress*.** Messages that appealed to the value of progress helped both policy stakeholders and practitioners express more optimism that improvement was possible despite challenges. To use this theme, draw on phrases like *changing with the times, forward-thinking, moving ahead, moving forward, or updating what we do*. The overall idea is to communicate that *progress is possible*.
- 2. To emphasize objectivity and feasibility, use the theme of *Responsible Management*¹, especially with practitioners.** Messages that emphasized that improvement science allowed for careful, thoughtful, and iteratively-built solutions resonated especially well with practitioners, and shifted their thinking away from the unproductive understanding that improvement comes through *Subjective Individual Experience*. To use the theme of *Responsible Management*, draw on phrases like *careful decision making, methodical approach, step-by-step approach, taking one step at a time, or thoughtful course of action*.
- 3. To give audiences a way to think about the distinctive characteristics of improvement science and NICs, compare them to the everyday experience of navigating using a GPS system.** This analogy helped participants understand improvement science as a process of continuous assessment and adjustment, with a clear goal in mind. By highlighting the way that a network of users both feeds data to and gets data from a modern GPS system, this metaphor helped policy stakeholders and practitioners think of NICs as an innovative way of conducting and sharing applied research, and not merely relationship-building opportunities. An example of this metaphor appears below.

¹ *Responsible Management* refers to the general idea of making wise decisions about the use of resources. “Management” here is not intended to refer to administrators.

Sample Use of the Recommended Explanatory Metaphor

Networked Navigation: Driving with Data

To think about how to use improvement science in education, it's helpful to think about how we draw on different experiences, skills, and technologies to support better navigation.

Drivers draw on the accumulation of skills and the development of judgment. Skills and judgment are built through explicit training and guided practice and honed through multiple and varied experiences. Judgments and decisions are also constantly informed by data and assessments of that data. Drivers draw on multiple tools—dashboard gauges, mirrors, the road and traffic conditions they see through the windshield, and even what they hear and feel from the vehicle. They integrate these sources of information and use them to make adjustments, spot possible obstacles, or select the best route to their destination.

In addition to skilled observation and judgment, today's drivers also rely on a networked system to make navigation more efficient and effective. Modern GPS systems like Google Maps have improved on the older technology of paper maps by involving a network. The system relies on data from multiple sources and many users to get reliable, real-time data that can predict possible problems and select a better route. The map responds to the judgments that drivers make, taking that data and adjusting what it recommends based on that input.

Improvement science in education is a lot like modern navigation with a networked GPS. The drivers of educational improvement use both their professional skills and data to figure out how to move past obstacles. This is an age-old practice—but the improvement science approach has upgraded features: better ways to handle and process data, for one, and Networked Improvement Communities (NICs), for another. NICs connect educators, researchers, and stakeholders. Together, they engage in cycles of assessment and adjustment until an effective course of action is found. Just as drivers and GPS systems keep monitoring their progress until they reach their destination, members of NICs continually collect evidence to evaluate the impact of their intervention, share this data, and make course corrections until the problem is addressed. And just as learning how to drive requires training and practice, efforts at improving education quality work best if practitioners are trained to use improvement science and then hone their skills through engagement in NICs.

Some themes and frames backfire or have other unintended consequences.

Some ways of framing an issue can ensnare thinking in unproductive evaluations and judgments. FrameWorks' careful analysis of public thinking and the improvement science field's current messaging pinpointed a set of existing communications habits that have unproductive frame effects and thus should be avoided. These traps are easy to fall into because they represent logical ways to respond to challenges that improvers have observed from experience. When communicating improvement science and NICs, be wary of the following traps.

- **The Debunking Trap.** The research into the thinking of policy stakeholders and education practitioners shows that talking about improvement science will meet with predictable challenges. It's tempting to craft communications that try to “debunk” misconceptions, but this is a trap. These existing patterns are activated by the process of association—and when activated, they are cognitively reinforced. Restating a misconception therefore strengthens it. A more effective course is to navigate around unproductive patterns of thinking. Avoid using cues that activate them and, instead, “make the affirmative case” by using framing strategies that activate other, more productive ways of thinking.
- **The Innovation Trap.** Broad, global statements that hype the “unique” or “innovative” nature of improvement science and NICs are likely to backfire by tapping into concerns about fads in education reform. Descriptions, explanations, imagery, and examples should characterize the approach as *distinctive*, but not unique; as *sound*, but not a singular solution.
- **The Jargon Trap.** Improvers, like practitioners in all fields, share a vocabulary that can be opaque or fuzzy to outsiders (think “continuous learning” and “cycles of improvement”). Without definitions *and* examples, people outside the field struggle to understand what these terms mean in practice and how they improve outcomes in real life. To avoid this trap, always offer definitions and use explanatory examples or scenarios that illustrate abstract concepts and their value.

Framing is a group activity. Please join the reframing effort.

Sharing and telling a common story is part of what it takes for a field to drive major and meaningful social change. The careful research summarized here offers the improvement science field an important asset in defining, elevating, and advancing the way to “get better at getting better.” We invite you to begin to use these frames in your work, learn more about them, and share them with others working to drive progress in education.

For more information, go to www.frameworksinstitute.org/
<http://www.frameworksinstitute.org/evidence-and-implementation1.html.html>

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