

Charting a Path for Improvement: Our Driver Diagram

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Editor's Note: This is the third in a series of articles published in this journal about Reading Recovery and improvement science.

The North American Reading Recovery® Community is a complex system made up of teachers, teacher leaders, trainers, site coordinators/liaison administrators, district administrators, and principals. Improvement across a system as large and complex as Reading Recovery requires shared understanding of problems and disciplined processes to find solutions to those problems.

In *Learning to Improve*, Tony Bryk suggests that successful improvement efforts depend upon comprehensive analyses of a problem and its potential causes. Central to this work are improvement science tools to help us “See the system that produces current outcomes” (Bryk et al., 2015, p. 57). The complexity of the Reading Recovery network is a strength — enabling robust, consistent implemen-

tation across myriad contexts. This same complexity makes it difficult for individuals within the system to understand or see the system as a comprehensive whole.

In 2018, a diverse set of stakeholders from across the Reading Recovery community came together to share our perspectives and build mutual understanding of potential factors impeding our improvement (Forbes et al., 2019). Specifically, our aim was to investigate and understand possible contributors to variation in results and implementation across the Reading Recovery network. Engaging in a causal system analysis, Reading Recovery community members identified areas of variation throughout our complex system. These initial analyses of the problem and potential causes became the reference point for constructing our theory of improvement. Since that time the work has continued, including the formation of a leadership Hub to drive the improvement work (Lochmiller & Karnopp, 2020).

This article describes the ongoing work of the Hub as we implement improvement science methods and tools to guide improvement efforts. First, I share the purpose of a driver diagram, then explain the key components of the driver diagram and their relationship to a theory of improvement. Examples from the Reading Recovery community's current driver diagram illustrate these components.

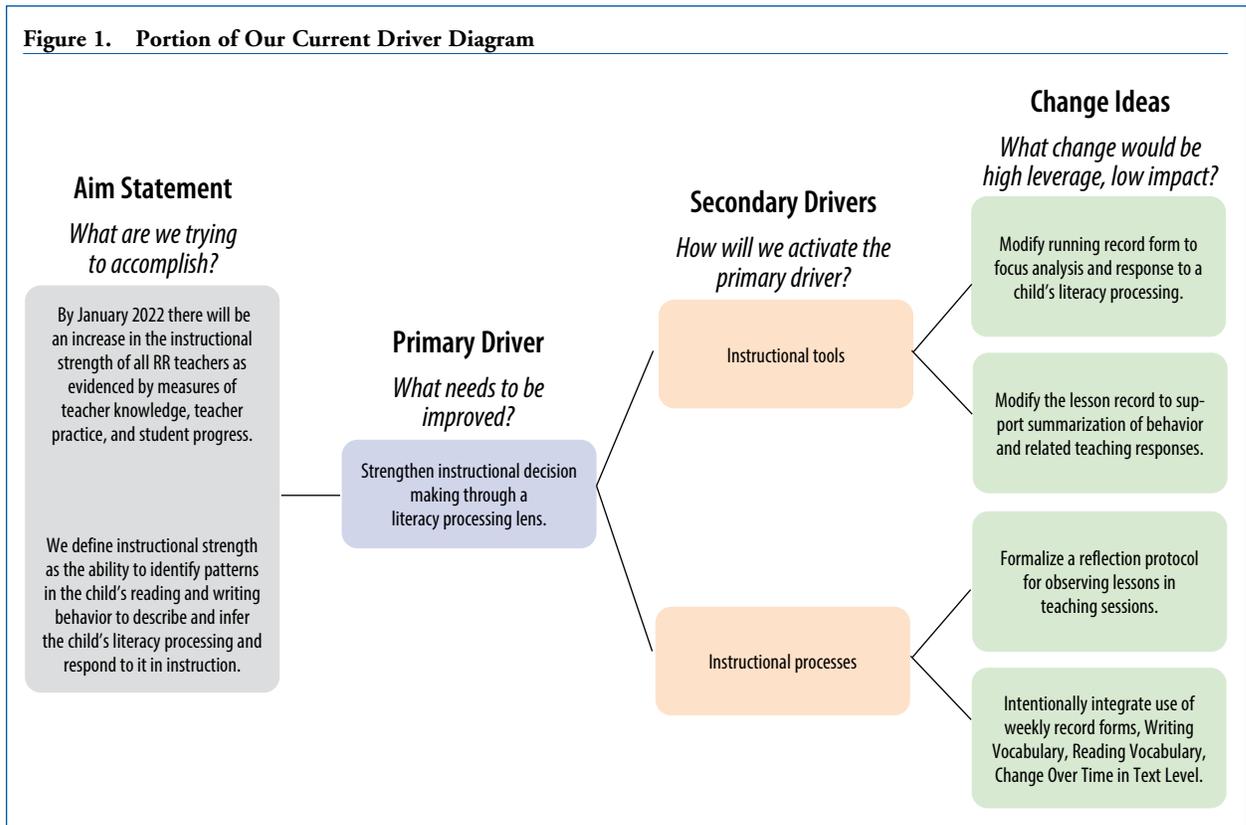
Driver Diagram: A Tool to Map Our Path to Improvement

To chart a course for improvement work, improvement science methods include a tool called a *driver diagram* (Bryk et al., 2015; Langley et al., 2009), a visual representation of the current theory of improvement. A driver diagram explicitly maps out a path toward an intended outcome. It provides an improvement community with a shared understanding of the problem, the goal, and potential paths toward the goal, thus aligning individuals' work across a complex system.

A driver diagram typically includes four components: an aim statement, primary drivers, secondary drivers, and change ideas. As well, driver diagrams depict the interconnections between these components and the hypotheses they represent. A core tenant of improvement science is that our theory of improvement and the

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Figure 1. Portion of Our Current Driver Diagram



tools to depict that theory are never complete and always evolving (Bryk et al., 2015). Figure 1 illustrates part of our most recent driver diagram, which is continually revised in conjunction with emerging findings.

Aim statement

Developing a driver diagram begins with identifying a measurable improvement aim that answers the question, “What are we trying to accomplish?” The aim statement includes a timeframe, a target outcome, and an indication of how the outcome will be measured. The current aim statement driving our improvement efforts is, “By January 2022 there will be an increase in the instructional strength of all Reading Recovery teachers as evidenced by measures of teacher knowledge, teacher practice, and student prog-

ress.” The aim statement communicates intent and provides a focus for improvement efforts. Measurement is embedded within the statement enabling evaluation of whether a change is actually an improvement.

Primary drivers

A primary driver reflects a hypothesis about a key lever in achieving the aim. A primary driver identifies “what or where” to launch improvement efforts and represents a prediction about an area of influence that is high-leverage and instrumental to enacting a change. The primary drivers offer an “overview of the landscape for change” (Bryk et al., 2015, p.76). Although too general by themselves to direct improvement efforts, they describe what needs to change for improvement to occur. While multiple avenues to improve-

ment exist for a single problem, it is imperative to identify a small set of high-leverage drivers to maximize your improvement efforts.

Figure 2 illustrates three primary drivers, each describing potential levers toward the aim of increasing instructional strength: (a) Strengthen instructional decision making through a literacy processing lens, (b) Systematize collaboration at all levels, and (c) Use data effectively and flexibly to understand and advocate. Our theory of improvement suggests that innovation and change are necessary in each of the three areas in order to achieve the identified aim.

Secondary drivers

The secondary drivers represent the powerful levers that are essential to achieve productive change. They

articulate how a primary driver will be activated. The link between the two drivers is crucial to improvement efforts, as the primary driver describes what needs to change and the secondary driver describes how to implement that change. Figure 1 illustrates our primary and secondary drivers, as well as the relationship between them. For example, we hypothesize that changing/modifying instructional tools (secondary driver), will strengthen instructional decision making through a literacy processing lens (primary driver).

Change ideas

Change ideas represent high-leverage, low-impact, user-centered ideas that may be developed, tested and refined. Specific improvement or change ideas link to one or more secondary drivers (see Figure 1). Change ideas are usually linked to a process inherent in daily practice (i.e., refining standard processes or tools, designing new tools or processes to foster improvement, or developing new norms to sustain productive change (Bryk

et al., 2015). Once a change idea is selected, the Plan-Do-Study-Act (PDSA) cycle is used to test the change.

Interpreting the Driver Diagram

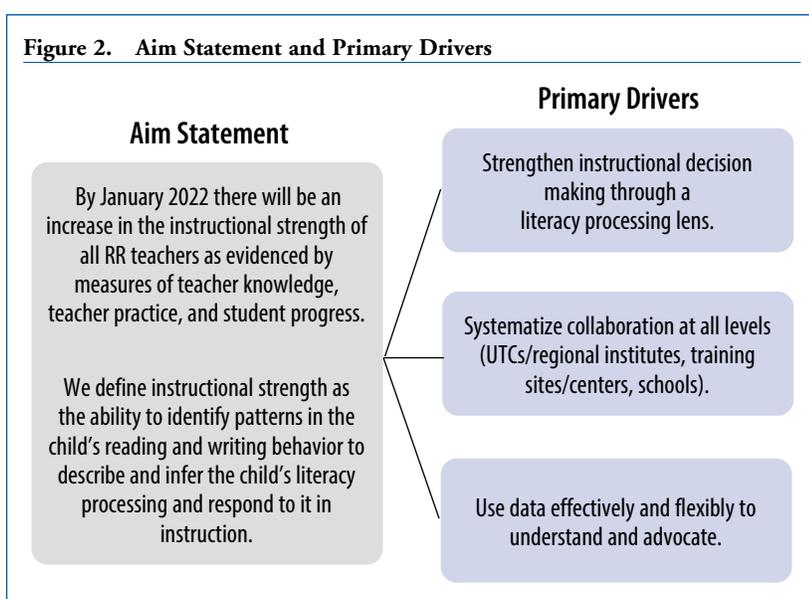
It is important for all individuals who are working toward the aim to have a clear understanding of the components of the driver diagram and the interconnections between them. The driver diagram may be easiest to read from right to left, beginning with a single change idea. For example, beginning with a change idea (see Figure 1), we hypothesize that if we “modify the running record form to focus analysis and response to a child’s literacy processing” (change idea), this will change a daily instructional tool (secondary driver), which in turn will “strengthen teachers’ instructional decision making through a literacy processing lens” (primary driver), and move us toward our aim of increasing the instructional strength of all Reading Recovery teachers (Aim Statement).

Conclusion

A driver diagram is an essential mechanism to organize the improvement efforts of stakeholders across complex systems. It aligns the work of an improvement community by providing a shared understanding of the problem, the goal, and potential paths toward the goal. Like predictions of progress, the driver diagram provides a plausible path toward achieving a specific aim. Just as teachers use observations of student behaviors to evaluate a child’s progress and identify instructional adjustments resulting in revised predictions of progress, the driver diagram is an evolving tool, revised in concert with evidence from PDSA cycles. It reflects the continuous nature of improvement work, as our predictions and hypotheses evolve in response to our findings.

Though no single change idea will, in isolation, achieve our aim, improvement science offers our community new and innovative ways to conceive and test changes and more disciplined processes for evaluating the improvement potential of the change. This commitment to inquiry and learning is foundational to Reading Recovery as Clay reminds us to be open to new understandings that might lead us to paths of change. In the words of Marie Clay,

I live in a perpetual state of inquiry, finding new questions to ask, then moving on. I do not have ‘a position’ or a safe haven where what is ‘right’ exists. Pragmatism precludes idealism. I search for questions which need answers. What exists in the real world? And how well do our theories explain what exists? (Clay, 2015, p. 3)



About the Author

Dr. Shari Worsfold is a member of the North American Reading Recovery Improvement Science Leadership Hub. She is a past president and a current member of the Canadian Institute of Reading Recovery (CIRR) Board of Directors. Prior to her initial training as a Reading Recovery teacher in 1997, she taught kindergarten and Grades 1 and 2 in Haines Junction, Yukon Territory, Canada. In 2004, she completed teacher leader training in Nova Scotia and returned to Yukon Territory to support Reading Recovery and primary classroom teachers. In 2014, Shari became the primary years consultant with Yukon Education and the liaison administrator for Reading Recovery in the Territory. In 2017, she moved to Victoria, British Columbia, and became one of two teacher leaders for the tri-district Southern Vancouver Island Reading Recovery Consortium until her retirement in 2020. In addition to sharing her knowledge at the Canadian National Reading Recovery Conference for both classroom and Reading Recovery strands, Shari has also presented at the RRCNA National Conference in Columbus, OH, as well as the International Reading Recovery Institute in Vancouver, British Columbia, Canada in 2016.



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