

THE K-12 IMPROVEMENT IMPERATIVE: Pathways to adopting continuous improvement

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INTRODUCTION

Almost every organization faces an improvement imperative: businesses must grow their profits and market penetration, hospitals strive for better patient outcomes, and nonprofits look to increase their impact. K–12 school systems are no exception.

Every principal and superintendent accepts their role knowing that they will be expected to make their schools better. For education leaders, improvement often means boosting state test scores, raising graduation rates, increasing college enrollments, lowering student discipline incidents, implementing new STEM programs, or updating their technology and facilities.

When it comes to meeting the improvement imperative, education leaders have no shortage of options to pursue—new curricula, technologies, pedagogies, and programs abound. Historically, most K–12 improvement efforts consist of a top-down approach to implement a solution de jour across a school or district.

Unfortunately, however, improvement efforts in education routinely break down because they don't account for the complex interdependencies across a school system that get in the way of faithful implementation. For example, a professional development initiative intent on training teachers to differentiate their instruction may run into staffing policies that don't afford teachers the time they need to plan differentiated lessons, and enrollment practices that make the range of student needs in a given classroom unmanageable.¹ As another example, an effort to adopt restorative justice discipline practices may lose steam when it clashes with mainstay classroom management strategies honed to maximize instructional minutes.²

In the midst of these perpetual struggles, some K–12 schools and districts across the country have recently begun pursuing an approach to improvement with a history that dates back to automobile manufacturing in the 1950s: a set of methods collectively referred to as “continuous improvement.”³ Continuous improvement is not a solution. Rather, it's an approach for diagnosing the systemic causes of problems, identifying possible solutions, and then shaping and refining those solutions through feedback and iteration.⁴

By putting the principles of continuous improvement into practice, a number of school systems have seen compelling results. For example, the Fresno Unified School District used continuous improvement to increase the number of students applying to nonlocal colleges by over 50%.⁵ Summit Public Schools used continuous improvement to decrease the test score performance gap between



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its English learners and non-English learners by 50%.⁶ Networks of schools using continuous improvement in both Connecticut and Chicago saw their graduation rates increase by roughly 10%.⁷ Many other schools participating in improvement networks have seen similar results.⁸

Yet the compelling rationale and convincing examples that back continuous improvement alone will not ensure its adoption across K–12 schools. Whenever school system leaders seek improvement, their choices about how to improve depend on context.

This paper aims to help the proponents of continuous improvement approaches better understand how context shapes choices about how to improve.

The insights offered here come from looking at improvement efforts through the lens of the Jobs to Be Done Theory.⁹ This theory starts with a simple premise: all people—school system leaders included—strive to make progress in their lives. Progress, however, does not happen devoid of context. People seek progress within a set of circumstances, and those circumstances shape their decisions. A “job” represents a common desire for progress plus the circumstances in which that desire frequently arises. Just as people hire contractors to help them build houses or lawyers to help them build a case, people “hire” different types of products, services, programs, and initiatives to help them make progress when “jobs” arise in their lives.¹⁰

To identify the Jobs to Be Done that cause leaders to adopt various approaches to improvement, we interviewed school system leaders in the summer of 2020 about their recent improvement efforts. (For additional details on our research methodology, see Appendix A.) We hope that these insights help funders, policymakers, intermediaries, and school system leaders pursue the improvement imperative with more predictable success.

THE JOBS THAT DRIVE THE QUEST TO IMPROVE

From our interviews and analysis we discovered three pathways or “jobs” that shape how school system leaders adopt improvement efforts.



Job 1: Correct

I have a specific problem. Help me fix it.

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Leaders who adopted continuous improvement to solve a specific problem experienced a job we call **Correct**.

These leaders were driven to see their school systems improve due to a deep sense of personal responsibility for their students' success and well-being. Yet, when they had focused on one particular area of improvement, they had met repeated failure. As their problem persisted, they noticed that just trying to get the right program, policies, or practices in place didn't work. From this observation came an understanding that their problem persisted due to complicated interdependencies in their organizations. The more they came to realize that their problems were systemic, the more they also realized that they didn't have tools for addressing systemic problems.



Job 2: Coordinate

I'm frustrated. Help me rally others to move the needle.

These leaders were not drawn to continuous improvement as a body of theory and research out of sheer curiosity. Rather, they wanted a solution to their specific problem. Continuous improvement became appealing when they saw it as a way to break through the systemic issues that had been holding their progress back. Importantly, however, they wanted to tackle their problem quickly, which meant they didn't want to spend a lot of time learning about continuous improvement theory and honing their practices. Sometimes, the perceived complexity of continuous improvement was a hurdle. But they were also attracted to the iterative nature of continuous improvement—it allowed them to learn and pivot quickly and therefore get to working solutions faster.



Job 3: Reorient

We can't do what we did in the past. Help us find a new way as a school system.

These leaders often got started with continuous improvement by diving in with a small coalition of willing colleagues. They didn't try to push improvement system-wide, and they didn't wait to complete a training regime before beginning. They just jumped in with one or two colleagues, learned as they went, and brought others along as successes and broader interest multiplied.

To fulfill this job, proponents of improvement—such as foundations, researchers, consultants, or technical assistance intermediaries—should present their approaches as a simple set of easy-to-learn

tools and practices, not a body of research. Where possible, tailor those tools to the particular problem at hand and offer ongoing, on-demand coaching to help leaders quickly learn how to apply improvement principles to their particular problems.

Job 2: Coordinate

I'm frustrated. Help me rally others to move the needle.

Leaders with a specific problem that spanned beyond their immediate realm of influence experienced a job we call **Coordinate**.

Like those with the job of Correct, these leaders felt a deep sense of responsibility to students, and available data told them their school system was not fulfilling a key dimension of that responsibility. Unlike those with the first job, however, they had also come to realize that some of the factors causing unacceptable outcomes were beyond their ability to control.

Similar to their counterparts with the first job, these leaders were not looking for a new philosophy or method for doing improvement work. What they really wanted was a specific solution to the problem at hand. They bought in to continuous improvement because it gave them a language and a set of methods they could use to rally together the other people they depended on in order to solve their problem. They also wanted to shine as leaders, and spreading continuous improvement within their systems gave them a way to be recognized as such.

Fulfilling this job doesn't require teaching leaders a method for improvement. These leaders would prefer specific solutions for their problem. What they need is a complementary set of strategies for rallying and coordinating people across different departments who need to be involved in helping to solve their problem.

Job 3: Reorient

We can't do what we did in the past. Help us find a new way as a school system.

When leaders wanted an entirely new approach for helping the people in their school system solve complex problems, they experienced a third job we call **Reorient**.




As with the leaders driven by the other two jobs, these leaders knew from available data that student outcomes were not what they needed to be, which triggered a keen sense that they were failing students. But addressing shortcomings in outcomes was no simple matter. They confronted not a single problem, but a system riddled with problems. Persistent breakdowns spanned from their district office to individual classrooms, and from attendance and achievement to facilities and transportation.

Experience told them that calling out problems and pushing one-off solutions didn't work. Shining a light on breakdowns led to finger pointing, not lasting change. New and shiny programs frequently drowned in the undertow of "this too shall pass" attitudes. These leaders could have concluded naively that they just needed to push longer and harder. Instead, they came to realize that even the strongest programs would fail when the individuals working in a system lacked the influence and insight to address the complex interdependencies across the system.

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By virtue of their roles, these leaders were uniquely positioned to see how the problems in their schools were complex and interdependent. But their range of influence and insight didn't translate into omniscience or absolute control. They couldn't know the detailed workings of every facet of their organizations, nor could they directly manage all the work involved in improvement. They knew that problems needed to be solved by the people closest to them, and those people needed new ways of seeing their problems and working together in order to tackle those problems successfully. Continuous improvement fit the bill.



	 Job 1: Correct	 Job 2: Coordinate	 Job 3: Reorient
Scope of focus	One subunit within the system	One subunit and the interdependencies with adjacent units	The entire system
Desired solution	A method for solving a problem	A method that can rally colleagues to solve a problem together	A method for organizing teams to solve systemic problems

The main shortfall of continuous improvement in addressing this job was its complexity. Leaders themselves might invest deeply in understanding the theory, research, and frameworks of continuous improvement. But getting hundreds or even thousands of staff to internalize and implement a new philosophy and set of methods for solving problems was no easy task. Accordingly, these leaders often let go of strict adherence to continuous improvement practices in order to get broad buy-in, and were willing to simplify or translate language of continuous improvement to make it easier to teach. Nonetheless, uneven understanding and implementation were a persistent challenge that was often exacerbated by changes in staffing.

To fulfill this job, improvement proponents should offer leaders a method for organizing their staff members and teams to solve systemic problems. Create resources that make teaching the basics of continuous improvement persuasive, quick, and easy. Furthermore, help leaders map out the varying levels of improvement expertise among their staff and then target learning and development resources to those varied levels of expertise.

CATALYZING IMPROVEMENT

As noted in the introduction, improvement is a common aim for school system leaders. Continuous improvement practices, however, are just one solution they might turn to in their efforts to help their schools improve. Other potentially appealing approaches to improvement could include embarking on a strategic planning process, overhauling their curriculum, implementing new professional development systems, pushing a personalized learning initiative, or hiring consultants to help develop an improvement strategy. On the whole, any program or initiative that promises to help leaders overcome major problems could attract school system leaders.

So, what made leaders pick continuous improvement over other programs and initiatives? In our interviews, we saw a few precursory conditions that seemed to prime leaders to choose continuous improvement. First was the persistent failure of past efforts to the point where leaders came to their own conclusion that just pushing a new program or initiative was unlikely to work. Second was prior exposure to continuous improvement methods, or at least an affinity for data-based decision-making and problem solving. Third was a belief that front-line educators—those closest to students and to the problems that hindered serving students—were the best equipped to solve systemic problems.

Given these precursory conditions, those interested in helping more school systems adopt continuous improvement practices should consider two tacks. First, find ways to identify and recruit leaders whose circumstances meet these precursory conditions. For example, look for school systems with long-standing problems headed by leaders with backgrounds in data-oriented fields such as science and mathematics. Second, find ways to catalyze these precursory conditions for more school system leaders. For example, expose more leaders to continuous improvement by promoting

it in trade magazines and at conferences geared to school system leaders. In those promotion efforts, highlight effective ways to use data, as well as the narratives of front-line staff members empowered through continuous improvement.

Conclusion

All school systems seek improvement, and the practices and frameworks of continuous improvement are a valuable set of tools for helping many improvement efforts succeed. But the research and track record backing continuous improvement approaches are no guarantee that school system leaders will choose them among the array of other programs, initiatives, and resources that promise to help leaders solve problems and make progress. Our hope is that our research offers a lens into how to better design any improvement program so that school system leaders pick it and stick with it. Solving this element of the school improvement equation is key to helping schools make the kinds of improvements that will produce tangible benefits for students.

APPENDIX — METHODOLOGY

Clayton Christensen, Bob Moesta, and others pioneered the Jobs to Be Done theory to address a few major limitations in conventional marketing research. First, quantitative research tends to surface only correlations among customer demographics, product features, and purchasing decisions—not the true causes of demand. Second, more qualitative market research, such as focus groups, tends to uncover customers’ stated preferences and not their actual preferences as revealed by their decisions and trade-offs. Jobs to Be Done aims to uncover the circumstances in people’s lives that cause them to make the choices they make.¹¹

Sample selection

To understand the Jobs to Be Done driving the adoption of continuous improvement approaches, we interviewed leaders from school districts and charter school networks who had recently adopted continuous improvement practices within their school systems. Their roles included school principal, chief academic officer, director position at district office, and superintendent.

Our sample is not statistically representative of school districts across the country. Nonetheless, we wanted our research to offer insights relevant to districts beyond our sample. We therefore took efforts to interview leaders from school systems of varying sizes and from a variety of regions across the US.

Interview method

Interviewees were asked to describe their experiences as if they were creating “mini-documentaries” to reveal how they selected their approaches

to continuous improvement. As key events came up in their stories, we dug deeper to understand how these events influenced the eventual decisions. These mini-documentaries allowed us to capture the forces shaping continuous improvement decisions in the language of school system leaders themselves.

Analysis

After each interview, we tagged key elements of the stories according to a Jobs to Be Done framework called the Forces of Progress, which helps identify the pushes, pulls, anxieties, or habits that shape each individual’s decision-making.

For example, an administrator may be *pushed* toward finding a new way to improve when it becomes clear that an existing program or initiative isn’t working and *pulled* to continuous improvement by its emphasis on empowering people on the front lines. At the same time, the *habit* of leading through top-down mandates and the *anxiety* associated with learning the complexities of continuous improvement may hinder that leader in deciding to commit to continuous improvement.

After tagging the interviews, we then consolidated the interview data and conducted a cluster analysis of the interviews based on the similarities among their Forces of Progress. This analysis revealed three clusters of interviews with similar circumstances. By reviewing the details of the interviews within each cluster and noting the commonalities across their stories, we developed the three Jobs to Be Done characterized in this paper.

NOTES

1. See James R. Delisle, “Differentiation Doesn’t Work,” *Education Week*, January 6, 2015, <https://www.edweek.org/ew/articles/2015/01/07/differentiation-doesnt-work.html>.
2. See Jill Barshay, “The Promise of ‘Restorative Justice’ Starts to Falter Under Rigorous Research,” Hechinger Report, May 6, 2019, <https://hechingerreport.org/the-promise-of-restorative-justice-starts-to-falter-under-rigorous-research/>; or Allison Fried, “If You Won’t Do Restorative Justice Right, Don’t Do It,” *Education Week*, June 13, 2019, <https://www.edweek.org/ew/articles/2019/06/14/if-you-wont-do-restorative-justice-right.html>.
3. For a definition, see “Continuous Improvement,” Encyclopedia.com, accessed December 6, 2020, <https://www.encyclopedia.com/management/encyclopedias-almanacs-transcripts-and-maps/continuous-improvement>.
4. To learn more about applying continuous improvement, see Joakim Ahlstrom, *How to Succeed with Continuous Improvement: A Primer for Becoming the Best in the World* (New York: McGraw Hill Education, 2014). To learn more about applying these practices in K–12 education, see Anthony S. Bryk et al., *Learning to Improve: How America’s Schools Can Get Better at Getting Better* (Cambridge, Mass.: Harvard Education Press, 2015).
5. Jorge Aguilar, Michelle Nayfack, and Susan Bush-Mecenas, “Exploring Improvement Science in Education: Promoting College Access in Fresno Unified School District,” Policy Analysis for California Education, June 2017, <https://edpolicyinca.org/sites/default/files/FUSD-continuous-improvement.pdf>.
6. Adam Carter, “Collectively Improving the School Experience and Learning Outcomes of Our English Learners,” Marshall Street Initiatives, originally published in May 2017 for Aspen’s National Commission on Social, Emotional, and Academic Development, <https://docs.google.com/presentation/d/1ECyYoX-jiXvIbd0WplPUODVr8WVvaenndqastG423Wv8/edit>.
7. The UChicago Network for College Success and the Connecticut RISE Network were both highlighted by the Carnegie Foundation for the Advancement of Teaching for their success in improving graduation rates. See “2020 Spotlight Honorees,” Carnegie Foundation for the Advancement of Teaching, accessed January 9, 2021, <https://www.carnegiefoundation.org/engage-with-us/spotlight-on-quality-in-continuous-improvement/2020-spotlight-honorees/>.
8. For a review of improvement results, see Bruna Barletta et al., “Networks for School Improvement: A Review of the Literature,” Columbia University Center for Public Research and Leadership (CPRL), <https://cpri.law.columbia.edu/sites/default/files/content/CPRL-Gates%20Report-082318-FINAL.pdf>.
9. For additional insights on the Jobs to Be Done that shape decisions in K–12 education, see Thomas Arnett, Bob Moesta, and Michael B. Horn, “The Teacher’s Quest for Progress,” Clayton Christensen Institute, September 12, 2018, <https://www.christenseninstitute.org/publications/teachers-jobs-to-be-done/>; and Thomas Arnett and Bob Moesta, “Solving the Curriculum Conundrum,” Clayton Christensen Institute, March 2020, <https://www.christenseninstitute.org/wp-content/uploads/2020/05/Curriculum-Conundrum-3.16-update.pdf>.
10. To better understand Jobs to Be Done theory, we recommend the following sources: Clayton M. Christensen et al., *Competing Against Luck: The Story of Innovation and Customer Choice* (New York: Harper Business, 2016); and Bob Moesta, *Demand-Side Sales 101: Stop Selling and Help Your Customers Make Progress* (Austin, Texas: Lioncrest Publishing, 2020).
11. To learn more about the Jobs to Be Done frameworks and interview methodology, see Bob Moesta, *Demand-Side Sales 101*.

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About the Institute

The Clayton Christensen Institute for Disruptive Innovation is a nonprofit, nonpartisan think tank dedicated to improving the world through Disruptive Innovation. Founded on the theories of Harvard professor Clayton M. Christensen, the Institute offers a unique framework for understanding many of society's most pressing problems. Its mission is ambitious but clear: work to shape and elevate the conversation surrounding these issues through rigorous research and public outreach.

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