

Through the looking glass

School system reform is a complex endeavor requiring system leaders to make decisions about numerous interlinked issues. In so doing, they have to take account not only of how to maintain their current system performance but also decide what interventions they will choose to make in order to improve that performance, while addressing the socio-economic, political, and cultural context within which they operate.

The question at the heart of our research is whether it is possible to produce a topographical route map for systems undertaking the journey required to transform their performance, one that will be useful in guiding them through this complexity. To this end, while our intent has been to fully embrace and appreciate the complexity of the decisions that improving system leaders need to make, we have

focused on extracting a discernable pattern from their actions that could prove helpful to others.

Our analysis produced three main findings:

1. *It's a system thing, not a single thing*
There is a common pattern in the interventions improving systems use to move from one performance stage to the next, irrespective of geography, time, or culture. These interventions, which we term the “improvement cluster,” are mutually reinforcing and act together to produce an upward shift in the trajectory of the system. Though there is a different cluster of interventions for each stage of the system's journey (poor to fair, fair to good, good to great, great to excellent), there is a dominant pattern throughout that journey. ➔

Methodology

To understand whether there is a common intervention pattern or not, we asked the leaders of improving systems to chronicle all the main interventions they undertook in their systems over the reform period¹⁰. This ultimately yielded a database of almost 575 interventions across the 20 systems (what we refer to as the “interventions database”). We then categorized these interventions into ten broad areas (e.g. professional development, accountability, learning model), before further disaggregating each of the ten into a total of 60 distinct subareas. Accountability, for example, is an area including the subareas of performance assessment, school inspections, and self-evaluation. We then categorized each intervention according to whether it constituted a change in structure, resource, or process, and which agent (e.g. principal, teacher, student) it acted upon. We developed a universal scale of student outcomes to plot all systems onto a single achievement scale across time¹¹. We mapped each system, with its interventions against the various stages of the improvement journey (from poor to fair, fair to good, good to great, and great to excellent) and undertook a series of analyses regarding the intervention pattern.

In order to determine the cluster of interventions per improvement journey, we followed a three-step process. First, we calculated how often each of the 60 unique intervention subareas occurred in a given improvement journey. Second, we analyzed the relative importance of each intervention occurrence in that given improvement journey stage relative to the other improvement journeys. We then assigned each intervention to the improvement journey in which it was most concentrated. For example, while enrolment (comprised of the subareas: fulfillment of basic needs, increasing school seats, and provision of textbooks) constitutes just eight percent of the total number of interventions made in the “poor to fair” improvement journey, it is almost ten times more concentrated in this stage than in the other improvement journey stages. As such, we assigned it to the “poor to fair” journey. Lastly, we triangulated the analysis results with what we heard from system leaders during interviews about the most important interventions they undertook during their improvement journey.

The Appendix contains a detailed explanation of our methodology.

2. Prescribe adequacy, unleash greatness

There is a strong, correlation between a school system's improvement journey stage and the tightness of central control over the individual schools activities and performance. Systems on the poor to fair journey, in general characterized by lower skill educators, exercise tight, central control over teaching and learning processes in order to minimize the degree of variation between individual classes and across schools. In contrast, systems moving from good to great, characterized by higher skill educators, provide only loose, central guidelines for teaching and learning processes, in order to encourage peer-led creativity and innovation inside schools, the core driver for raising performance at this stage.

3. Common but different

Our findings indicate that six interventions occur with equal frequency across all the improvement journeys, though manifesting differently in each one. These six interventions are: revising curriculum and standards, ensuring an appropriate reward and remuneration structure for teachers and principals, building the technical skills of teachers and principals, assessing students, establishing data systems, and facilitating the improvement journey through the publication of policy documents and implementation of education laws.

To what extent can a system leader exercise choice?

Ultimately, every system leader is faced with the challenge of integrating three dimensions of the system's improvements in order to successfully develop and implement its improvement journey: its current level of performance, the necessary interventions, and the context in which these are made (Exhibit 7). The important question is to what extent a system leader can exercise choice in this algorithm? A simple answer is that all the improving systems we examined within a given journey show little variation in what they do, but a much greater extent of variation in *how* they do it.

The evidence suggests that each journey stage comes equipped with a dominant intervention cluster – this is the sum total of individual interventions we observed systems using to raise

the level of their performance from one stage to the next. The intervention cluster can be thought of as a menu from which the improving systems implement a critical mass.

This is not to suggest that systems have no choice: they have a great deal of choice in how they implement these interventions, in terms of the sequence, the emphasis, or the manner in which the system rolls out the interventions across its schools. It is here that we see the impact of history, culture, structure, and politics come fully into play, producing significant differences in the particulars of how systems manifest their reforms. Chapter 3 explores the contextualizing of interventions in depth.

To use a simple analogy, a person seeking to lose weight sustainably must do two things: exercise and consume fewer calories. They must do both for the regimen to be fully effective. These two interventions are akin to the intervention cluster, and are true irrespective of where this person lives in the world. Once the regimen has been embarked upon, this person now has the choice of how to implement the exercise program (tennis, hiking, gym, etc.) and diet (all protein, balanced blend of carbohydrates and protein, liquid, etc.). Their decision about which combination to follow will and should be based on their personal preferences, metabolic rate, and attributes; otherwise, they will quickly abandon their weight loss plan. This is where culture and tradition play a key role. Similarly, though there is a dominant cluster of interventions for each improvement journey stage, system leaders must then decide on an implementation path that suits its context in order to be able to sustain and persevere with its improvement program. Willpower, discipline, and persistence are required to see both weight loss and school system reform through to transformation.

Though there is no magic formula for improving school system performance, this research points to a clear path that improving systems have undertaken at each stage in their journey – a path illuminated by signposts. The remainder of this chapter describes this path and its signposts in greater detail. ➔

Exhibit 7: A system leader must integrate three dimensions when crafting and implementing an improvement journey

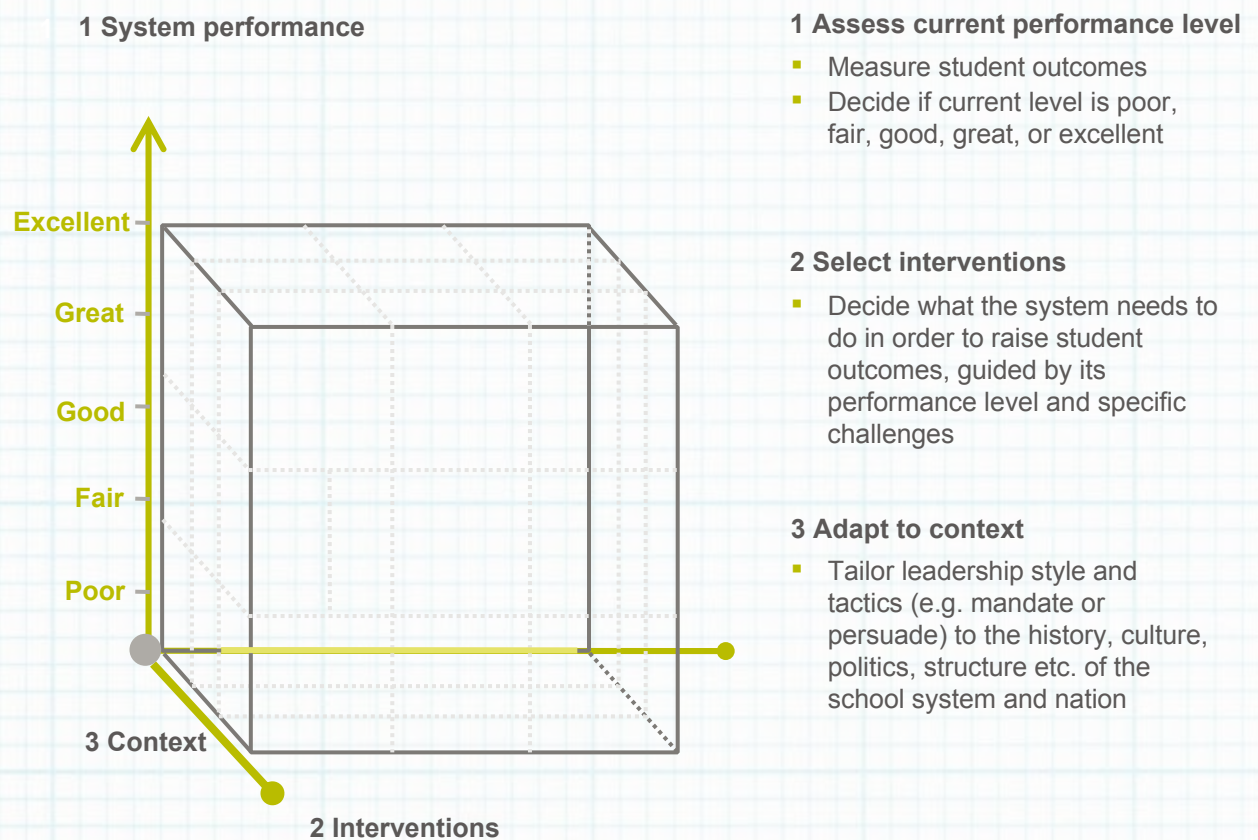


Exhibit 8:

A unique “intervention cluster” exists for each improvement journey, with six interventions common across all journeys

Improvement journey	Poor to fair	Fair to good	Good to great	Great to excellent
Theme	<i>Achieving the basics of literacy and numeracy</i>	<i>Getting the foundations in place</i>	<i>Shaping the professional</i>	<i>Improving through peers and innovation</i>
Intervention cluster ¹	<ul style="list-style-type: none"> ▪ Providing motivation and scaffolding for low skill teachers <ul style="list-style-type: none"> – Scripted teaching materials – Coaching on curriculum – Instructional time on task – School visits by center – Incentives for high performance ▪ Getting all schools to a minimum quality level <ul style="list-style-type: none"> – Outcome targets – Additional support for low performing schools – School infrastructure improvement – Provision of textbooks ▪ Getting students in seats <ul style="list-style-type: none"> – Expand school seats – Fulfil students’ basic needs to raise attendance 	<ul style="list-style-type: none"> ▪ Data and accountability foundation <ul style="list-style-type: none"> – Transparency to schools and/or public on school performance – School inspections and inspections institutions ▪ Financial and organisational foundation <ul style="list-style-type: none"> – Optimization of school and teacher volumes – Decentralizing financial and administrative rights – Increasing funding – Funding allocation model – Organizational redesign ▪ Pedagogical foundation <ul style="list-style-type: none"> – School model/streaming – Language of instruction – Language of instruction 	<ul style="list-style-type: none"> ▪ Raising calibre of entering teachers and principals <ul style="list-style-type: none"> – Recruiting programs – Pre-service training – Certification requirements ▪ Raising calibre of existing teachers and principals <ul style="list-style-type: none"> – In-service training programs – Coaching on practice – Career tracks – Teacher and community forums ▪ School-based decision-making <ul style="list-style-type: none"> – Self-evaluation – Independent and specialized schools 	<ul style="list-style-type: none"> ▪ Cultivating peer-led learning for teachers and principals <ul style="list-style-type: none"> – Collaborative practice – Decentralizing pedagogical rights to schools & teachers – Rotation and secondment programs ▪ Creating additional support mechanisms for professionals <ul style="list-style-type: none"> – Release professionals from admin burden by providing additional administrative staff ▪ System-sponsored experimentation/innovation across schools <ul style="list-style-type: none"> – Providing additional funding for innovation – Sharing innovation from front-line to all schools
Common across all journeys	Six interventions: [1] Revising curriculum and standards; [2] Reviewing reward and remunerations structure; [3] Building technical skills of teachers and principals, often through group or cascaded training; [4] Assessing student learning; [5] Utilizing student data to guide delivery, and [6] Establishing policy documents and education laws			

¹ Total number of interventions in each phase: poor to fair, n=103, fair to good, n=226, good to great, n=150, great to excellent, n=94

Source: McKinsey & Company interventions database