Expanding the Reach of Education Reforms
What Have We Learned About Scaling Up Educational Interventions?

Over the past 20 years, we have seen both increasing demand to improve the quality of education in the United States and a new supply of improvement practices generated by external service providers outside the formal school system.

On the demand side, individual states and the federal government have pushed for or put in place standards, assessment systems, and incentives to improve the performance of all students and have provided funds for improvement. States, districts, schools, and teachers must now determine how to build and maintain the capability, within the newly evolving performance-based systems, to provide a world-class education for each student.

On the supply side, the federal government and private philanthropists have invested heavily in external providers to develop and disseminate interventions intended to improve the existing practices of teachers in classrooms and to build the needed capacity within schools and school districts to meet standards. In the past, external providers might have helped a handful of schools or teachers. As the nation has demanded systemwide improvement, however, these external providers have been challenged to scale up their reforms—implementing them more widely, more deeply, and more rapidly than in the past.

Research Purpose
At the request of The Ford Foundation, the RAND Corporation convened the leaders of 15 external-reform provider organizations to discuss the practical implications of what they had learned about scale-up over the last 20 years. Following the discussions, these individuals described their experiences and their firsthand accounts of the scale-up process in a set of papers now assembled in Expanding the Reach of Education Reforms: Perspectives from Leaders in the Scale-Up of Educational Interventions. The book describes the processes by which external providers have implemented and supported improvements in classroom-level teaching and learning—moving from demonstration sites to reach more teachers, more schools, and more districts. The contributors to the book are listed at the end of this brief.

The findings described should be of interest to anyone attempting to develop and implement a scale-up strategy—whether developer, funder, district or school policymaker, or district and school staff. It will be of special interest as historical documentation of several very important attempts to scale up education reform.

What Experience Teaches About Scaling-Up Education Reforms
Taken as a whole, the perspectives of these school reform leaders help to define the multiple criteria...
that contribute to the concept of a successful scale-up, outline the nature of the process of scale-up, and describe the specific activities actors in the scale-up process commonly undertake.

Successful Scale-Up Efforts Must Address Multiple Criteria
A complex definition of a successful scale-up that includes four characteristics has now gained widespread use:

- spread: implementation of reform practices at additional sites or in additional groups within existing sites
- depth: a significant improvement in classroom practice, enacted in deep and meaningful ways, that influences student performance
- sustainability: policy and infrastructure systems in place to support continued, deep improvement in classroom practice over time
- shift in ownership: transfer of knowledge and authority to sustain the reform to the site, allowing continuous improvement and further scale-up.

The last characteristic of a successful scale-up effort has only been articulated recently. The faddism prevalent in public education improvement strategies is testimony to the fact that shifts in ownership seldom take place. Without a shift in ownership, adopters must rely indefinitely on external providers to sustain the core practices of the school, a relationship that cannot be, and has not been, sustained financially over the long haul.

The Scale-Up Process Is Both Iterative and Interactive
Twenty years ago, the process of scale-up was often expressed as a replication model characterized by a one-way flow of information and mandates from external providers or districts to schools and teachers, with success being determined by fidelity of implementation at multiple sites and with failure being attributed to teachers not supporting the effort. The authors in this volume, as well as current literature, have described a process that attempts to support changes in teacher practice more systematically and significantly through interactions among providers, teachers, schools, and districts. These providers have found that supporting teachers in implementing and sustaining the desired curricular and instructional practices requires changes in policies governing standards, assessments, and accountability and in the supporting infrastructure, including incentives for teachers and other actors, funding and resource allocation patterns, and networking arrangements. This perspective indicates that the process of supporting teachers in a scale-up effort is necessarily

- interactive, involving the providers, teachers, schools, and districts in relationships that continue over time
- adaptive, through reciprocal relationships among the actors and reactions to unfolding situations
- iterative, with continuous reexamination and learning over time
- nonlinear, with the sequence of activities depending, to some extent, on the need for adjustments as the actors adapt to unfolding circumstances.

The give-and-take, learning, and adaptation needed represent a shift from the notion of forcing a constrained set of practices on teachers to one of changing the system to support good teaching practices and good teachers. A scale-up effort would involve spread-

ing this process and these interactions across many sites, exponentially expanding the challenges to the provider to achieve a successful scale-up because potential negotiations, learning, and responses multiply as sites are added.

This framework applies to a broad array of interventions across a broad array of targets. For example, interventions that provide services to individual teachers emphasize the relationship between the provider and the teachers. But the new practices learned are doomed to fade without policy and infrastructure support from the school and district. Similarly, interventions that focus on whole schools emphasize the relationships between the providers and the school but cannot be sustained without district support.

Scale-Up Requires Attention to Common Core Tasks
Analysis of the perspectives of these leaders suggests a set of common tasks each external provider of improvement services must face:

- develop and provide support for implementation
- ensure high-quality implementation at each site
- evaluate and improve the intervention
- obtain the financial support needed
- build organizational capacity to support scale-up
- market the product
- create approaches to meet local context needs
- sustain the reform over time.

These tasks are interrelated. They are the elements of a strategy for effectively achieving the four characteristics of a successful scale-up: depth, spread, sustainability, and ownership. The approach a provider organization chooses is highly related to its specific design. For example, if the provider believes that the only way for schools to establish a high-quality curriculum is to have the provider supply it, the approach to supporting implementation will include providing highly specified curriculum materials. In addition, the approach the provider takes on one scale-up task will affect what he or she chooses to do on another. The contributed chapters detail the experiences of provider organizations in developing effective scale-up strategies that address these tasks.

While this list of tasks focuses on the activities of the external providers, it also implies a set of related activities for teachers, schools, and districts. Just as it is, for instance, incumbent on providers to supply high-quality professional development services for teachers, schools and districts must provide the teachers opportunities to take advantage of the training and must create and sustain incentives for them to change practices consistent with the training. All must jointly monitor implementation and assess whether the practices are leading to the desired results.

Conclusions and Recommendations
No matter the target of reform or the design construct, the scale-up process is iterative and complex and requires support from multiple actors. This is likely to remain so for the foreseeable future. The actors must jointly address a set of known, interconnected tasks if scale-up is to succeed; how each group addresses these tasks will vary according to design, context, and resources. Perhaps most impor-
tant, the actors must align policies and infrastructure into a cohesive network of supports to sustain effective practice. In general, however, the lessons of previous efforts to scale up external interventions lead to the following conclusions and recommendations:

- Providers must create supports for the implementers that are effective and economical and that meet the specific needs of the sites.
- Promoting depth of changed practice requires developing procedures and measures of implementation for ensuring implementation quality and applying these procedures consistently.
- Assessing program effectiveness will require creativity and flexibility to address the methodological challenges that flow from efforts that are complex, locally situated, adaptive, and iterative. A combination of methods and studies that develop evidence over time is likely to have a high payoff.
- The challenges of funding will remain over the life of the scale-up, but their nature will change over that time. While funding markets are shifting to make providers potentially more responsive to customers' needs, much greater attention must be paid to the different types of funding needs, and when they occur, if scale-up is to be achieved.
- Increasing the capacity to serve new markets well poses a significant challenge and will continue to do so. This can partly be remedied by obtaining funding specifically for capacity-building investments, but providers and funders must also recognize specific capacity needs and create effective plans to address them.
- To increase the likelihood of creating and sustaining successful working relationships, providers must focus their efforts on thoughtful, committed customers, and customers must carefully review designs and implementation supports to ensure a good fit with their needs. All must pay attention to ensuring that this process takes place within an affordable cost structure.

- Providers and users must work together to understand the constructs of the design and mutually adapt to promote improved student performance. This process will be long and will involve complex change. The parties must be willing and prepared to work together to create a coherent system of supports.
- As yet, little is known about how to sustain changes and how to transfer ownership effectively. Achieving these ends is likely to involve all the previous activities, including creating a coherent support structure and promoting engagement at every level. These concepts must be addressed directly and must receive significant attention if they are to be achieved.

Those who seek to foster improved performance in the nation's education systems by funding research, design, and development can learn much from those who have been working on these problems. When planning their own programs, funders or investors should be guided by these conclusions and recommendations, which provide a basis for assessing the adequacy of plans for carrying out the core tasks in proposals for new interventions or improvements in existing interventions. Similarly, those who would use the skills of these external organizations should assure themselves that they understand both the capacities of the organizations and what it will require to utilize these capacities. The set of tasks identified can be used to develop questions about the characteristics and costs of interventions and about the orientation and capacities of provider organizations, teachers, schools, and districts seeking school improvement services. Their use can increase the likelihood of a good fit between the needs and capacities of the school and the services they are purchasing. By drawing on the lessons learned from previous scale-up efforts, including some of the successes and failures catalogued in the book, decisions and policies can be crafted to provide the high-quality education for our children that our national goals envision.
This research brief describes work done for RAND Education documented in Expanding the Reach of Education Reforms: Perspectives from Leaders in the Scale-Up of Educational Interventions, edited by Thomas K. Glennan, Susan J. Bodily, Jolene Galegher, and Kerri A. Kerr, MG-248-FF, 2004, 746 pages, $40, ISBN: 0-8330-3659-9, available from RAND Distribution Services (phone: 310-451-7002; toll free: 877-584-8642; or email: order@rand.org). The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND’s publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark.