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ORIGINAL ARTICLE

Teacher ownership versus scaling up system-wide educational change: the case of Activity Based Learning in South India

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Abstract
A significant challenge for large-scale system-wide educational change is reconciling the importance of teacher ownership with the work of scaling up successful innovations. This article explores this dilemma in the context of a remarkable statewide transition to Activity Based Learning (ABL) in the government schools of Tamil Nadu, India. ABL, a pedagogical approach grounded in child-centered philosophies of learning, was developed by classroom teachers and educational leaders seeking to reach children disengaged from school. Advanced by reformers who respected teachers and understood the importance of teacher ownership in educational change efforts, ABL reached every primary-level government school in the state through a rapid scale-up. Drawing primarily on interviews with teachers, reform leaders, and other state-level officials, we explore the roles and forms of participation made available to teachers at different stages of the reform initiative. We also discuss how leaders built responsiveness to teacher feedback into each stage of scaling. We argue that the case of ABL in Tamil Nadu illustrates a powerful rethinking of system-level change, one that promotes teacher ownership through a movement-like approach in which leaders build egalitarian partnerships with classroom teachers and invite them into the educational change process, even through rapid and extensive scaling.

Keywords Teacher ownership · School reform · Scaling up · Educational change · Activity Based Learning · South India

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1 Introduction

A central dilemma for educational leaders advancing pedagogical innovations in schools around the world can be framed as teacher ownership versus scaling up. On the one hand, we know that powerful pedagogical improvements are often developed, pursued, and advocated by educators who draw on their professional knowledge and experience, and who believe passionately in what they are doing (Cochran-Smith and Lytle 2009). As opposed to reforms developed and mandated by outsiders, which are often viewed with deep skepticism by those tasked with implementing them (Cochran-Smith and Lytle 2009; Little 1993), teacher-driven educational change is necessarily aligned with teachers' knowledge and beliefs, and viewed as appropriate for students and the school context. Moreover, such teacher-led projects generate the ownership, commitment, and, indeed, political assent to learn and change (Burns Thomas and Niesz 2012) that only full participation in school change efforts.

On the other hand, once compelling pedagogical innovations are developed by educators, leaders and policymakers want them to reach as many students as possible. If an educational approach is successful, extending that approach far and wide seems the only reasonable response. At that point, however, the educator-developed practice becomes a mandate for a different, much larger group of educators. In other words, taking an educator-designed program of school improvement to scale often means imposing it on teachers who did not develop it, did not ask for it, and may well view it with deep skepticism. The program that was effective in its original context tends to disappoint at scale. This is the dilemma of teacher ownership versus scaling up pedagogical reform.

In light of this dilemma, the Activity Based Learning (ABL) movement in South India is a fascinating case study. ABL, a pedagogical approach grounded in child-centered, constructivist philosophies of learning, was developed over a period of years by classroom teachers and educational leaders seeking to reach children disengaged from school. Pursued by a network of educators and leaders devoted to improving the quality of education in the state of Tamil Nadu, the ABL movement was characterized by a democratic ethos and a profound respect for teachers (Niesz and Krishnamurthy 2013, 2014). When years of hard work and a dose of serendipity led to a remarkable political opportunity, ABL was scaled up to over 37,000 government schools in a mere 3 years. Yet, despite the vast and rapid scaling, reformers understood the importance of teacher ownership; it was promoted as both principle and strategy.

In this article, we draw on interviews with teachers and leaders of the ABL movement to illustrate the ways in which teacher participation—and thus ownership—was prioritized in efforts to transform the approach to teaching and learning in Tamil Nadu's primary-level government schools. The analysis presented here focuses on the ways in which teachers were invited to contribute to educational change throughout each stage of scaling. Although many of the teachers we interviewed were skeptical of ABL initially, they came to embrace the pedagogical method through their participation over time. We argue that the case of ABL in Tamil Nadu illustrates a powerful rethinking of system-level change through a movement-like approach in which leaders built egalitarian partnerships with classroom teachers and invited them into the change process. The contribution of this case study to the field of educational change is in its illustration of how one system-wide change effort focused on structures for student learning promoted teacher ownership throughout remarkably rapid and extensive scaling.

2 Theoretical framing: scaling and ownership

Decades of school improvement research has questioned the viability of the default approach to school reform: find an effective model program and replicate it at scale (Coburn 2003; Datnow et al. 2002; Elmore 1996, 2016; Fullan 1982, 1993, 2005, 2016; Rincón-Gallardo 2015, 2016; Rincón-Gallardo and Elmore 2012; Sarason 1971). Countless examples of great ideas in instructional improvement, ideas that have been thoughtfully developed, well vetted, and carefully transformed into implementable school change plans, have ended in disappointment. This pattern is so predictable that leading voices in educational change have advised would-be reformers to abandon the idea of scaling school change programs altogether (e.g., Elmore 2016; Fullan 2016).

A key reason that concepts like replication and scaling are rejected by those with extensive experience in school change is because they are inherently technical-rational ideas directing a tremendously complex, multidimensional process dependent on human agency (Datnow et al. 2002). Three of the many common problems with scaling reform highlight this disconnection between theory and practice. First is the turnover problem. When stakeholders associated with promoting a reform, whether they are politicians, policymakers, administrators, or teachers, move on to different roles or posts, reform activity often wanes (Coburn 2003; Colbert and Arboleda 2016; Datnow et al. 2002; Rincón-Gallardo 2015, 2016). Second is the "real school" problem (see Cuban 1990; Elmore 1996; Metz 1989; Rincón-Gallardo 2015, 2016; Tyack and Cuban 1995). Particular understandings of what schooling is, and how teaching and learning take place in schools, run deep in both the professional and public imagination. The resiliency of what Elmore (1996) has called the instructional core, the "basic conceptions of knowledge, of the teacher's and the student's role in constructing knowledge, and of the role of classroom- and school-level structures in enabling student learning," is remarkable in the face of the veritable "vortex of change" outside this core (p. 4). Third, and most relevant to our discussion here, is the ownership problem. The assumption that a program of educational change will be as successful in the classrooms of those on whom it was imposed as it was in the classrooms of those developed it has been proven wrong countless times (Datnow et al. 2002; Fullan 1993; Fullan and Hargreaves 1996). Educators who develop and "own" school change are invested in ways that future teachers, expected to replicate the program in their own settings, usually are not.

Researchers have discussed alternatives to technical-rational ways of understanding education reform. Datnow et al. (2002), for example, suggested that a sociocultural perspective helps us to better understand the nature of school change. Viewing the scaling of reform through a model of structure, culture, and agency, they argued that reform is a co-constructed process in the hands of many stakeholders. Coburn (2003) complicated the very idea of scaling, suggesting that the concept must include depth, sustainability, and shift in reform ownership in addition to the spread of innovation. Critiques of technical approaches to scaling can generally be distilled to the idea that we cannot mandate the ways in which people think, act, and change in contexts with extensive history and ingrained practice. It is not only that the education problems we wish to fix are challenging and intractable, although of course they are (Fullan 1993), nor is it simply that educational change requires constant energy, attention, and resources beyond the introduction of a new program of practice, although of course it does (Datnow et al. 2002; Glennan et al. 2004). It is that deep change in instructional practice in schools often requires change in teacher knowledge, identity, and beliefs (about learning, about one's students, and about what is possible in one's teaching context). This sort of engaged learning required for change is both precursor to and outcome of what

Fullan (1993) called *deep ownership*, which "comes through the learning that arises from full engagement in solving problems" (p. 31). In sum, a great deal of research suggests that, for reform to be successful, teachers must be agents of change rather than implementers of others' projects.

If most scholars of educational change are united on the importance of ownership and typical approaches to scaling do not attend to how deep ownership is developed, why explore the dilemma of ownership versus scaling in the ABL case? First, much of the research on both scaling reform and teacher ownership has taken place in the Global North (Fleisch 2016); scholarship on parallel issues in the context of the different histories, systems, priorities, and political opportunities of the Global South has been limited (Fleisch 2016; Rincón-Gallardo 2016). The most pressing challenges for schools in the Global South are clearly different from those that have been a focus of much of the school change literature. Rincón-Gallardo (2016), following Leadbeater (2012), argued that the perceived disadvantages of contexts in the Global South could lead to opportunities for more radical departures from conventional school practice. This appears to be true of the ABL case in South India.

Second, researchers are only beginning to explore educational change activity that looks less like program implementation and more like social movement activity (see Niesz and Krishnamurthy 2013, 2014; Rincón-Gallardo and Elmore 2012). Social movement approaches to education reform emerge and advance through non-hierarchical networks that include educators both at the grassroots and in leadership positions. Networks of educators engaged in movement activity provide powerful contexts for the transformation of knowledge, culture, and identity, and for the development of deep ownership (Niesz and Krishnamurthy 2014; Rincón-Gallardo and Elmore 2012). Movement-like school reform in the Global South, including compelling cases like the Learning Community Project in Mexico (Rincón-Gallardo 2015, 2016; Rincón-Gallardo and Elmore 2012), *Escuela Nueva* in Columbia (Colbert and Arboleda 2016), and ABL in South India (Niesz and Krishnamurthy 2013, 2014), has shown a path for educational change unlike that typically seen in the school reform literature. As such, these cases offer great promise in promoting our understanding of the dilemma of teacher ownership versus scaling up.

3 Research design and methods

Two research questions guided our study: What is the history of the ABL movement in South India? How did educators experience and make meaning of the movement? In the spring and summer of 2010, Tricia Niesz, along with research team members Ramchandar Krishnamurthy and Vaishali Mahalingam, interviewed 45 individuals in a variety of roles in Tamil Nadu and neighboring Andhra Pradesh. We interviewed 11 administrative and educational leaders, eight of whom were long-term members of the movement network. We talked with eight additional members of the network who were in supportive roles (e.g., consultants) but not regular employees of the state. We interviewed 13 teachers from three different regions and six teacher support personnel. Finally, we talked with seven outsiders to the reform movement, including university professors, community leaders, an NGO leader, and an education journalist.

Interviews were unstructured and aimed to elicit oral histories of the ABL movement as well as participants' experiences with and perspectives on ABL. For teachers in particular, we asked about their professional background and experience in the field of education, their introduction to and training in ABL, their views on strengths and weaknesses of ABL as

a pedagogical approach, and their perspectives on how ABL was introduced and scaled throughout Tamil Nadu. We also talked with teachers about the differences in their experiences before and after the transition to ABL. Interviews were conducted in either English or Tamil, at the preference of the interviewee, as two team members are fluent in both languages. All interviews were transcribed in their original language, and Tamil-language transcripts were translated into English. Interviews were complemented by visits to several schools, both rural and urban, to observe ABL in practice, as well as the collection of relevant official documents, internal documents, classroom materials, media coverage of ABL, and so forth. More recently, Kelli Ryan joined the project and, using publicly available evaluations and media accounts, we have worked to understand what has happened with ABL in Tamil Nadu in the 8 years since the initial fieldwork took place.

Throughout the project, we have taken a two-pronged approach to data analysis. Constructing a history of the ABL movement required *connecting* strategies of qualitative data analysis (Maxwell 2012) in order to integrate what we learned from various sources into a detailed, holistic, and chronological account. We triangulated oral histories and other descriptions to build a detailed understanding of how the movement and ultimate scaling of ABL proceeded. Understanding educator experiences and meanings as related to the movement required *categorizing strategies* of analysis (Maxwell 2012). In terms of the latter, after reading and rereading the data sources, we developed analytic codes inductively as we considered our data through the lens of our research questions. Using NVivo11 software, we coded our data to develop understandings of educator experience and perspective as related to participation in the reform movement. For example, inductive codes used to categorize data included those that reflected the topics of our interview questions (e.g., teacher descriptions of student learning in ABL, teachers' views on ABL training, etc.) and more specific themes that emerged in the interviews (e.g., the role of teacher feedback, teacher–student relationships, and ownership). Throughout and after recursively coding the data in NVivo11, we wrote analytic memos to document emerging findings and, ultimately, developed themes that represented participants' experiences and views.

We used both triangulation and member checking to validate and strengthen the trustworthiness of our analyses (Lincoln and Guba 1985). Throughout the interviews, we engaged in informal member checking through asking participants to comment on our emerging understandings of the ABL movement and trends we were finding throughout our data collection. In addition, several participants reviewed an initial report on the study and provided feedback through a more formal member checking process. We triangulated the data through comparing the oral histories, experiences, and perspectives of participants in different roles, different regions, and different histories with the movement. We also triangulated emerging findings across multiple kinds of data, including interviews, observations, and artifacts. Finally, multiple researchers were engaged in data collection, data analysis, and interpretation, which Lincoln and Guba (1985) consider another form of triangulation.

4 Activity Based Learning in South India

ABL is an approach to primary education (grades 1–4) that is underpinned by a conceptualization of the child as an autonomous, active, and engaged learner. Informed by several Indian and Western educational philosophies that loosely share a constructivist orientation (see Niesz and Krishnamurthy 2014), ABL is considered a child-centered pedagogical approach in which learning activities are pursued by the child independently and completed at her own

pace. In multi-age classrooms, students work independently and in small groups through carefully designed learning activities referenced on a learning "ladder." Children move around the room freely, consulting the ladder and accessing the attractive, child-friendly materials to be used in their learning activities. A chalkboard at the child's level extends around the perimeter of the ABL classroom, providing each child with a work space of her own. Teachers work with individuals and small groups, promoting and assessing children's learning at their current step in the learning ladder. When ABL was scaled throughout Tamil Nadu, traditional examinations were eliminated and textbooks were pushed out of the classroom, available as reference texts only.

ABL was developed from a prototypical method developed by a small group of teachers led by two charismatic educational leaders working at the Rishi Valley Institute for Educational Resources (RIVER), an NGO located in the state of Andhra Pradesh. After ABL was piloted in Tamil Nadu's capital city of Chennai, it was scaled up quite rapidly throughout the state (see Table 1) as an initiative of *Sarva Shiksha Abhiyan* (SSA), a federally funded, state-administered organization to promote the universalization of elementary education. Funded by the federal government with slowly increasing participation from state governments, SSA is not a permanent feature of the state's administrative landscape but a multi-decade program advancing universal school access and quality. In Tamil Nadu, a state known for relatively robust school attendance, school enrollment targets were achieved fairly early and SSA turned to ABL to improve school quality.

At the time of our study, reports of learning outcomes and other evaluations provided conflicting assessments of the reform's success; some showed fairly impressive gains in learning outcomes, and others were far less conclusive.

5 Findings

> Earlier we used to conduct lessons with books, but now we have to give more individual care to the children. That is only good, isn't it?… If a child is able to learn clearly because of us, it is only a matter of happiness for us. There is lot of satisfaction in this. *(translated from Tamil)*

> During those [earlier] times, the teacher would present lessons for 40 students, and they would finish the lesson for the sake of finishing it. But now it is not like that. Each student, when they complete a milestone, can complete it only when they are competent with those skills. *(translated from Tamil)*

These statements, made by two of the teachers we interviewed, represent a broader theme we found throughout our conversations with teachers. Teachers, many of whom were highly skeptical of ABL at first, grew to embrace ABL because they saw their students learning. In

Table 1 Timeline of scaling ABL in Tamil Nadu

Years	Scale
2003–2004	13 primary-level government schools in Chennai Corporation
2004–2005	All 264 primary-level government schools in Chennai Corporation
2005–2006	4160 primary-level government schools in Tamil Nadu (approximately 10 schools in each of 412 blocks)
2006–2007	All 37,486 primary-level government schools in Tamil Nadu

addition to their students' success in learning to read and in other subjects, some teachers highlighted the confidence students showed in the classroom. ("They get a confidence that they can also read well. In all ABL classes the students' self-confidence has increased.") Researchers have suggested that teachers' perception of the effectiveness of educational innovation is the most important factor in promoting their ownership (Glennan et al. 2004; Nunnery 1998). This appeared to be the case among many of the teachers we interviewed; the success of the method in the classroom seemed to lead to teacher ownership even among those on whom ABL was imposed.

Although teacher ownership may be seen as an outcome of teachers' eventual success with the method, the leadership of the ABL movement took great pains to invite teachers' participation in each stage of the change process and listen to their critiques and challenges. One high-ranking official and key leader in the ABL movement noted that when they worked with teachers, they worked at the "teacher level, not the director or joint-director level. We are just like one of the teachers." Central to this approach was a respect for and close working relationship with classroom teachers. Indeed, when the movement's leader, Mr. Raman,[1] presented ABL's "Secrets of Success" to a group of educators, a concluding slide read:

> Most importantly… The State **trusted** its teachers, trusted its children, had **confidence** in its diagnosis, believed in the **strength of the new teaching and learning methodology** and knew exactly **how** to take the **reform to scale**. (emphasis in original)

In the following sections, we describe the leadership's efforts to promote teacher ownership through teachers' development of ABL, through ABL trainings for teachers, and through responsiveness to teacher feedback in scaling and institutionalizing ABL.

5.1 Promoting teacher ownership through teacher development of ABL

The developers of ABL in Tamil Nadu were classroom teachers working in the capital city of Chennai. Although the structure of ABL was borrowed from the work of RIVER, all of the curricular materials were developed anew. Not only was the language different from the prototype materials, Tamil Nadu had different state curricular requirements and different local needs and priorities. Raman and his colleagues both requested the participation of teachers who had excellent reputations and also asked for volunteers to work on the project. Ultimately, a team of approximately 20 teachers, working in subject-matter teams and surrounded by books, met after school for 6 months to develop the learning cards and ladder for the Chennai pilot. RIVER continued to support the effort, with the leaders visiting Chennai to advise, and the Chennai teachers visiting Rishi Valley for further professional development.

The process of developing ABL for Tamil Nadu was challenging, but built commitment and ownership. One teacher explained the painstaking work of developing the materials:

> It is very difficult. We will write [an activity card], we will tear it up. See, it is not that we have high educational qualifications. So we will write something, tear it up, write something else, tear it up. Then we will finalize it. *(translated from Tamil)*

After the first set of cards was developed and simply photocopied in black and white, they were piloted in the participating teachers' 13 schools, which became model schools. After this initial pilot, the teachers undertook a major revision. Another 6 months was spent making substantial changes to the activity cards. Cards that were not working well in the classroom, that had proven difficult for teachers and students, were revised or replaced. This revision also

[1] All proper names are pseudonyms.

included adding colorful art from art teachers to make the cards more appealing to children and to give them a more polished look. Then, the second round of piloting began.

The teachers involved in the ABL development process became ABL resource persons and trainers, as we discuss below. They were introduced to educational and political leadership in the state as the force behind ABL. One teacher told us that meeting and being recognized by the state's Minister of Education, Secretary of Education, and many interested IAS officers heightened the importance of what they were doing.

In summary, throughout the development of ABL in Tamil Nadu, schoolteachers without special credentials were invited into a new role of school change developers. Working together over months or years with visionary leadership encouraging and extolling their efforts, they participated in a community of practice that entailed learning and changing identity (Lave and Wenger 1991; Wenger 1998). Ownership was an obvious by-product.

5.2 Promoting teacher ownership through ABL trainings

Teacher professional development and training in ABL was a formidable project required for scaling the reform at each stage. Three approaches were taken to promote teacher ownership: (1) ABL trainers were primarily practicing teachers; (2) trainings avoided didacticism and focused instead on observation, participation, and two-way dialogue; and (3) leaders promoted learning through doing—trying ABL in the classroom—contextualized by support. In each of these ways, leaders sought to invite teachers into the educational change effort through a focus on experience, participation, and dialogue, as well as a rejection of hierarchical interactions and decontextualized lecturing.

First, those teachers who developed ABL for Tamil Nadu and became resource persons at model schools were the same teachers who were charged with running professional development sessions for ABL trainings. Ms. Ganga, a high-ranking leader, made reference to the teacher-to-teacher focus of early introductions to ABL: "A teacher of his own capacity, her own capacity, who comes and says that, 'I have been trying this for 2 or 3 years. This is working well. And why don't you try?'" She went on to explain that teachers are more likely to consider and ultimately accept ABL if it is introduced by a peer rather than an administrator or so-called expert. Although there were not enough resource teachers/ABL developers to reach the tens of thousands of teachers statewide, teachers and local teacher educators who were initially trained by resource teachers continued the trainings in later stages of scaling.

Second, ABL trainings avoided lectures and focused instead on observation and participation. For many teachers, this included playing the role of a student in an ABL classroom. Teachers were taken through the experience of a 6-year-old student starting school, completing activities just a student would. One of the teachers who developed and piloted ABL explained the early training this way:

> The first stage is like they are joining the first grade. [They completed] the first six-week set of activities for the new students… Arranging the groups, making them read, using the low-level blackboards. What we would expect a student to do, we made all the teachers do the same thing actually. That is how we provided training. *(translated from Tamil)*

One teacher who experienced this type of training described it as a "good time."

> We attended training as if we were just going to the school. We had a jolly time in the training… Even if I am 60 years old, if I have a training like that I would have a good time. The training was good. *(translated from Tamil)*

The goal of the resource teachers and the reformers, however, was not so much a good time but an experiential learning experience. Several reformers and administrators interviewed stressed that didacticism was not a part of teacher training. One administrator explained,

> We don't entertain the lecturing method for the training. We send the teachers to the school and ask them to be with a teacher, and we attach them to another teacher in the school. And so they learn things, and [we] ask them to visit us and ask about the problems.

Movement-leader Raman referred to this approach as "one of the critical development models… Let people see for believing you. Don't lecture, don't speak theory." Raman hastened to add that it was not that they never spoke theory, but that they introduced theory after teachers observed ABL in classrooms.

Indeed, in addition to observing and experiencing ABL, dialogue was prominent in ABL training. Teachers engaged in dialogue with one another, as one explained,

> They gave us opportunities to share our experiences. There are lot of things to learn and there are lot of things that we share with each other. We asked how they have implemented it in their school and learn from that. (*translated from Tamil*)

Observation and participation were complemented with discussions in the trainings. Ganga described this approach:

> Initially we showed them all model schools, how they worked. And we showed them all the cards in the training. "See these are all the new cards which they are practicing in the model schools. If you want to try it out, what do you say?" So their opinion was asked, cards were placed before them, and [the method] has been demonstrated. The ABL classroom has been demonstrated. Then [their] opinions were asked. "How do you feel about it? Do you think that this will work?"

Indeed, leaders introduced multiple mechanisms for teacher feedback throughout the training and scaling processes. Teachers were asked to name their difficulties with and critiques of ABL in order to obtain support and assistance and identify modifications that were needed. This feedback was apparently taken seriously. As one teacher told us, "When we give feedback they definitely act upon it… Right from the first training they have been asking us for our feedback" (*translated from Tamil*).

Finally, the teachers learned ABL through their own practice in the classroom. They were asked to try it out with the support of resource teachers and teacher educators who would visit classrooms and offer one-on-one assistance. Although teachers told us that ABL training was adequate or good, almost every teacher interviewed stressed that she learned ABL by practicing it, often with great initial struggle. One teacher provided a typical response, "First I did not understand. It was confusing. After 1 year of struggle, I got to know it well" (*translated from Tamil*). The length of time it took teachers to feel confident with ABL ranged from a couple of months to a full year, but almost all of the teachers described an initial period of difficulty and the eventual achievement of understanding ABL through practice over time.

Ultimately, these three approaches to teacher training—teachers as professional developers, training through participation and observation rather than lecture, and learning through doing with support—were all aimed at inviting teachers to observe, experience, consider, try, discuss, and, eventually, learn to be an ABL teacher. Ownership among teachers was sought through these approaches that prioritized experience and participation in change efforts in contexts in which teacher concerns were heard and support was offered.

5.3 Promoting teacher ownership through institutionalizing and enriching ABL

By the time of our research, ABL had been in place in parts of Chennai for five years and throughout Tamil Nadu for three. Yet, our interviews and visits to SSA and other state administrative organizations made it clear that ABL activity had not slowed. Although the team had taken advantage of the political opportunity to scale ABL throughout the state quickly, they knew the work to support and improve primary school education would need to continue. The state had moved into a stage of institutionalization and improving ABL, consistently called "enrichment" throughout our interviews with leaders. Teacher participation was central to the enrichment efforts, and, ultimately, these efforts provided more local autonomy to teachers in the classroom.

Two consultants, practicing teachers from a progressive private school associated with Rishi Valley, had conducted a close review of ABL practice and of reams of feedback submitted by teachers. This review led to another extensive collaboration with teachers and teacher support personnel to revise the curriculum to streamline and improve learning activity cards. This project also led to the addition of more science books and experiments, more arts in the classroom, as well as new kinds of professional development beyond ABL training.

Colorful picture books had also been added to every classroom early in the period of enrichment. We observed these books, referred to as "supplementary readers," hanging prominently on lines strung across the ceiling of every classroom we visited. Importantly, these books were authored and illustrated by Tamil Nadu's classroom teachers, which provided yet another opportunity for teachers to participate in and contribute to educational improvement. As one of ABL's state coordinators explained, "When practicing teachers prepare them [picture books], then they will be even more appropriate for children" (*translated from Tamil*). At the time of our research, plans were underway to produce teacher-authored small science books as well.

Another way that the state updated ABL in direct response to teacher feedback was to restructure the ABL system to provide more classroom-level autonomy for all teachers. Teachers had argued that more opportunities for full-class activities were needed in the ABL classroom. ABL's focus on self-paced learning left little room for class storytelling, singing, games, group discussion, science activities, and so forth. ABL was thus redesigned to include time for whole-class, teacher-selected activities. In addition, some learning activity cards were left "blank" for the inclusion of teacher-developed activities. Groups of educators were now able to develop their own activities relevant to their local communities. Reflecting on this shift in Tamil Nadu, the leader of RIVER told us, "Almost every district started, you know, creating something, owning up something."

In these ways, the work of enrichment can be seen as molding ABL to the teachers' wishes, as teachers' feedback shaped the changes made, teachers' work animated them, and teachers' autonomy in the classroom increased. Both locally and structurally, enrichment opened new avenues for teacher participation in the educational change efforts, and, potentially, built more opportunities for generating teacher support and ownership.

6 Conclusion

For policymakers aiming to improve teaching and learning in schools, working at scale is often taken for granted. Education researchers, on the other hand, have emphasized the almost-insurmountable challenges of scaling meaningful education practice and change.

Transformation in schools requires change in people. As Elmore (2016) argued, "When we are asking teachers and school leaders to do things they don't (yet) know how to do, we are not asking them to 'implement' something, we are asking them to learn, think, and form their identities in different ways" (p. 531). Fundamental change in teaching practice, in particular, is not nurtured through policy inputs but through communities of practice in which educators build knowledge, identity, and professional-cultural practice through shared activity over time (Lave and Wenger 1991; Wenger 1998). Ownership that promotes and sustains meaningful educational change requires the time and supportive contexts for such learning and identity work. As such, ownership is usually not scalable in the traditional sense. This noted, ABL in Tamil Nadu is an interesting case through which to explore the competing goals of ownership and scaling.

In Tamil Nadu, ABL movement leaders, many of whom were veteran teachers themselves, were committed to teacher participation as both principle and strategy. Teachers were asked to develop ABL and were given credit and acclaim for their efforts. Listening to students and fellow teachers, they continued to revise after piloting versions of the program, grounding their work in the realities of the classroom. When new teachers were introduced to and trained in ABL, they observed, they practiced, and they discussed the method. Learning and transitioning to ABL was not easy for teachers, but those we interviewed said they were ultimately convinced of the power of the method by seeing student learning. Built into every stage of the reform were mechanisms for soliciting and responding to teachers' feedback, their challenges, and their ideas. Teachers' ideas drove efforts to enrich the method through teacher-developed learning resources and structural changes to the approach, some which brought more local teacher autonomy into the classroom. In all of these ways, teachers were invited to participate in each stage of educational change in contexts in which their views and experiences were respected. For those who chose to engage in the work to transition to ABL, we suggest that teacher ownership was developed through this participation.

Viewing these findings through sociocultural theories of change, it is not surprising that an approach that invites participation rather than mandates implementation makes success more likely. Democratically-oriented contexts of change activity have the potential to both influence and reflect teacher identity and agency. Our findings add to the small but growing literature on social movements and educational change, suggesting that flattening bureaucratic hierarchies and building new networks that draw together the educational grassroots and system leadership opens new avenues and opportunities for creating countercultural change (See Niesz and Krishnamurthy 2013; Rincón-Gallardo and Elmore 2012). In terms of implications for theory, this study suggests that a closer look at the intersections among social movement theory and sociocultural theories of individual and community transformation may help us better understand and promote successful educational change efforts. Viewing scaling as growing a movement rather than promoting implementation highlights the meaning- and identity-work required and brings "to the forefront human agency and the cultural and political dimensions of change" (Rincón-Gallardo and Elmore 2012, p. 485).

As for implications for practice, this study illustrates that, with enough energy and commitment, even system-wide change efforts can invite teacher contribution and participation throughout multiple stages of scaling. Yet, a willingness to expend such energy and commitment requires a trust in teachers, as well as a sense of egalitarian partnership, that is not always present among reformers (as we currently see in the USA). The specific practices of the ABL movement could guide future system-wide change efforts in some contexts, but, if nothing else, the egalitarian collaboration between the state's reformers and classroom teachers is certainly something worth emulating universally.

An important limitation to our study was that we only interviewed 13 teachers from three regions. The three regions were within 2 hours of the capital city, Chennai, where ABL was developed. Although we saw a remarkable consistency in the practice of ABL in schools, and we heard a good deal of consistency among teachers' views on ABL across the regions, we cannot assume that we would find the same throughout the large and populous state. Different regions of Tamil Nadu had different introductions to ABL through different people. Although the teachers we interviewed told us that they embraced ABL as a pedagogical method, an evaluation conducted around the same time as our study found that, statewide, teacher ownership was much more variable than what we found in our interviews (NCERT 2011). We encourage future research of movement-like reform and/or system-wide change efforts that prioritize teacher ownership. Studies that adopt mixed methods approaches may be able to ascertain the scope of various levels of teacher ownership while also providing nuanced accounts of practice, experience, and perspectives. More research on *innovative* attempts to manage the dilemma of teacher ownership versus scaling up in both the Global South and the Global North has much to teach us about educational change.

7 Epilogue

Our study took place at the height of the institutionalization of ABL, a point at which reformers were cautiously optimistic about the sustainability of ABL. Tamil Nadu had been receiving increasing attention, both nationally and internationally, for ABL. Other Indian states had begun to adopt ABL (UNICEF 2015). Some participants even suggested that middle-class children, who had left government schools for private schools in high numbers in recent years, were beginning to return because of ABL. Raman said to us, "I don't think in the future, the textbook will again come and dominate the classroom. That era is gone."

Today, however, 8 years later, ABL has not been sustained with integrity in Tamil Nadu. Textbooks have again returned to a prominent place in the classroom as the state has turned to what is now called Simplified Activity Based Learning (SABL). ABL has been diluted by a return to other features of "real school" as well. The self-pacing that was lauded by teachers and reformers alike, for example, has been severely compromised with the reemergence of prescriptive timelines (UNICEF 2015). Reports suggest that teachers are getting mixed messages related to the mix of cards, textbooks, and conflicting assessment practices (Srividya 2016; UNICEF 2015).

The reason for this change remains elusive not only to us but even to others who were involved in the ABL movement in South India. We searched media, publications, and evaluations, and we asked our contacts in South India for explanations of the shift. We found none. A recent nation-wide evaluation of ABL also noted "difficulty in tracing the reasons for model changes in Tamil Nadu… although certain documents were available, these did not clearly specify the reasons for the changes" (UNICEF 2015, p. 68). Yet, evidence of some familiar challenges is available. A 2016 newspaper article suggested that increasing record-keeping drew teachers' attention from teaching and contributed to diluting ABL (Srividya 2016). Unsurprisingly, it also suggested that bureaucratic shifts in personnel also played a role (Srividya 2016). In addition to the "turnover" problem, the "real school" problem of educational change likely contributed to the retreat. The extent to which problems with ownership among stakeholders also played a part in the hollowing out of ABL in Tamil Nadu is something we may never know. Yet, despite ABL's fate in Tamil Nadu, it continues to grow throughout India. As RIVER works with education systems throughout India and beyond,

its leader emphasizes that the magic is not in the method itself: "So we were telling them, 'No, it's not that this [method] is the best thing. It is the ownership that is very important.'"

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References

Burns Thomas, A., & Niesz, T. (2012). Power, knowledge and positioning in teacher networks. *Professional Development in Education, 38*(4), 683–687. https://doi.org/10.1080/19415257.2012.667437.
Coburn, C. E. (2003). Rethinking scale: Moving beyond numbers to deep and lasting change. *Educational Researcher, 32*(6), 3–12. https://doi.org/10.3102/0013189X032006003.
Cochran-Smith, M., & Lytle, S. L. (2009). *Inquiry as stance: Practitioner research for the next generation*. New York, NY: Teachers College Press.
Colbert, V., & Arboleda, J. (2016). Bringing a student-centered participatory pedagogy to scale in Colombia. *Journal of Educational Change, 17*(4), 385–410. https://doi.org/10.1007/s10833-016-9283-7.
Cuban, L. (1990). Reforming again, again, and again. *Educational Researcher, 19*(1), 3–13. https://doi.org/10.3102/0013189X019001003.
Datnow, A., Hubbard, L., & Mehan, H. (2002). *Extending educational reform: From one school to many*. London: Falmer/Routledge.
Elmore, R. F. (1996). Getting to scale with good educational practice. *Harvard Educational Review, 66*(1), 1–27. https://doi.org/10.17763/haer.66.1.g73266758j348t33.
Elmore, R. F. (2016). "Getting to scale…" it seemed like a good idea at the time. *Journal of Educational Change, 17*(4), 529–537. https://doi.org/10.1007/s10833-016-9290-8.
Fleisch, B. (2016). System-wide improvement at the instructional core: Changing reading teaching in South Africa. *Journal of Educational Change, 17*(4), 437–451. https://doi.org/10.1007/s10833-016-9282-8.
Fullan, M. (1982). *The meaning of educational change*. New York, NY: Teachers College Press.
Fullan, M. (1993). *Change forces: Probing the depths of educational reform*. London: Falmer.
Fullan, M. (2005). The meaning of educational change: A quarter of a century of learning. In A. Lieberman (Ed.), *The roots of educational change* (pp. 202–216). New York, NY: Springer.
Fullan, M. (2016). The elusive nature of whole system improvement in education. *Journal of Educational Change, 17*(4), 539–544. https://doi.org/10.1007/s10833-016-9289-1.
Fullan, M., & Hargreaves, A. (1996). *What's worth fighting for in your school?* (Revised Edition ed.). New York, NY: Teachers College Press.
Glennan, T. K., Bodilly, S. J., Galegher, J., & Kerr, K. A. (2004). *Expanding the reach of education reforms: Perspectives from leaders in the scale-up of educational interventions*. Santa Monica, CA: RAND.
Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York, NY: Cambridge University Press.
Leadbeater, C. (2012). *Innovation in education: Lessons from pioneers around the world*. Qatar Bloomsbury: Qatar Foundation Publishing.
Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: SAGE Publications.
Little, J. W. (1993). Teachers' professional development in a climate of educational reform. *Educational Evaluation and Policy Analysis, 15*(2), 129–151. https://doi.org/10.3102/01623737015002129.
Maxwell, J. A. (2012). *Qualitative research design: An interactive approach* (3rd ed.). Thousand Oaks, CA: Sage.
Metz, M. H. (1989). Real school: A universal drama amid disparate experience. *Politics of Education Association Yearbook, 4*(5), 75–91.
National Council of Educational Research and Training [NCERT]. (2011). *Programme evaluation report: Activity Based Learning Tamil Nadu*. New Delhi, India: NCERT.
Niesz, T., & Krishnamurthy, R. (2013). Bureaucratic activism and radical school change in Tamil Nadu, India. *Journal of Educational Change, 14*(1), 29–50. https://doi.org/10.1007/s10833-012-9194-1.
Niesz, T., & Krishnamurthy, R. (2014). Movement actors in the education bureaucracy: The figured world of Activity Based Learning in Tamil Nadu. *Anthropology & Education Quarterly, 45*(2), 148–166. https://doi.org/10.1111/aeq.12056.
Nunnery, J. A. (1998). Reform ideology and the locus of development problem in educational restructuring: Enduring lessons from studies of educational innovation. *Education and Urban Society, 30*(3), 277–295.
Rincón-Gallardo, S. (2015). Bringing a counter-hegemonic pedagogy to scale in Mexican public schools. *Multidisciplinary Journal of Educational Research, 5*(1), 28–54. https://doi.org/10.4471/remie.2015.02.

Rincón-Gallardo, S. (2016). Large scale pedagogical transformation as widespread cultural change in Mexican public schools. *Journal of Educational Change, 17*(4), 411–436. https://doi.org/10.1007/s10833-016-9286-4.

Rincón-Gallardo, S., & Elmore, R. (2012). Transforming teaching and learning through social movement in Mexican public middle schools. *Harvard Educational Review, 82*(4), 471–490. https://doi.org/10.17763/haer.82.4.46751717307t4j90.

Sarason, S. (1971). *The culture of the school and the problem of change*. Boston, MA: Allyn and Bacon.

Srividya, P. V. (2016). New learning methods, old teaching constraints. *The Hindu.* Retrieved February 22, 2017 from https://www.thehindu.com/news/national/tamil-nadu/New-learning-methods-old-teaching-constraints/article16798673.ece.

Tyack, D. B., & Cuban, L. (1995). *Tinkering toward utopia: A century of public school reform*. Cambridge, MA: Harvard University Press.

UNICEF. (2015). *Evaluation of Activity Based Learning as a means of child-friendly education: Final report.* New Delhi, India: UNICEF. https://www.unicef.org/evaldatabase/files/EI-UNICEF_Evaluation_of_ABL_as_a_means_of_child-friendly_education-Final_Report_India_2015-024.pdf. Accessed 14 Nov 2016.

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, UK: Cambridge University Press.