

Activity Based Learning (ABL)

An evaluation of the pedagogy, impact on learning outcomes, political economy of adaptation and subsequent scale-up of the programme in Tamil Nadu, India

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Report 3

The Political Economy of the Scale up of the ABL Programme in Tamil Nadu

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Executive Summary

Given the prevailing high levels of corruption, limited political will for reforms, and politicized bureaucracies, the successful implementation of the far-reaching educational reform of ABL in Tamil Nadu is a unique triumph story. The paper deconstructs this success story in order to understand the political reasons behind the effective implementation, scale-up and sustainability of ABL.

The study focuses on four major aspects of the ABL reform: Agenda setting and design; implementation and scale-up; system-wide change and teacher support; and sustainability. It uses Archer's (1981) conceptual piece which provides a theoretical model that comes closest to explaining Tamil Nadu's overall ABL execution phenomenon, and it distinguishes three types of educational politics and highlights three types of transactions.

The paper investigates the political economy circumstances that permitted the state-wide scale up of this radical pedagogic reform to all the about 35,000 government and aided schools of Tamil Nadu. The analysis identifies five major factors that enabled this massive reform that has sustained over eleven years and through three changes of government:

1. Favourable initial conditions – with a history of educational innovations having been tried out in Tamil Nadu through the 1970s and 80s, especially in the field of literacy and adult education, which used novel educational methods such as song and dance;
2. The passion and sustained work of a senior bureaucrat over a 17 year period, and his interpersonal qualities of winning the cooperation of teachers and ministers, and in particular by early co-opting of teacher union leaders into his educational reforms;
3. The wisdom of the Tamil Nadu government – after seeing the very constructive educational work of an officer in Chennai – to make the same officer the State Project Director of Sarva Shiksha Abhiyan and support him, which gave him the authority to take his reform ideas statewide;
4. The government's ability to gain the cooperation of the teacher unions of Tamil Nadu, due to its responsiveness to teachers' demands, by making feasible compromises and cooperative amendments to the ABL programme based on teachers' views, though the implementation of the Essential Services Maintenance Act to break labour unions' strike actions in 2002 may also have rendered teacher unions less combative and more pliable;
5. The sustained training, and robust monitoring of the implementation of the ABL method by the Sarva Shiksha Abhiyan office.

Evidently, the successful implementation, scale up, support and sustainability of the ABL pedagogy in Tamil Nadu was an amalgamation of several factors, some replicable and others not. A charismatic, education-driven senior bureaucrat in the right position was one of the most prominent factors for the successful implementation, but this is not replicable in other states, except perhaps by serendipity. What can be replicated, however, is the practice of retaining in place a bureaucrat who shows passion and commitment to improving a particular area of work of his/her interest, rather than frequently transferring out such IAS officers.

The paper identifies the conditions under which a nation-wide scale up of ABL can happen.

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1. Introduction

Research into the political economy of education investigates the relationship between politics and educational reforms – an area fairly underdeveloped in India and almost non-existent in the study of ABL.

There is a predominant need to understand politics as consisting of ‘all the activities of cooperation, negotiation and conflict in the use, production and distribution of resources through the interaction of formal and informal institutions and through the distribution of private and public power’ (Leftwich, 2006). More than 20 studies conducted across the developing world concluded that corruption and elite capture is prevalent, political parties are personalistic, there is limited political will and demand for extensive reform, commitment to overarching national strategies is weak, and there exist very low levels of ‘stateness’, which generate politicised bureaucracies (Leftwich 2006). Within this context of politics, one can construe that the design and implementation of effective and conducive policies, including educational policies, may be significantly impacted by the political economy within which they are made. Therefore, political processes and practices greatly influence the paths and results of educational policies, playing an important role in the success or failure of an educational reform such as ABL.

What is ABL?

The Activity Based Learning (ABL) approach - a child-centric and activity-based programme – is a pedagogical approach that has been adopted in primary schools in certain parts of India. The ABL approach aims to provide engaging and challenging learning materials and flexible space for learning through activity. The main feature of this approach is that learning is self-initiated, independent and at an individual pace. Unlike a standard classroom setting, it allows for multi-age and multi-grade learning to occur. Again, unlike a standard classroom setting, each child progresses at their own pace along what is called a ‘learning ladder’. The concept of a learning ladder is that each rung depicts mastery of a given competency which a child must achieve before progressing on to the next milestone. This systemises diagnostic feedback on an individual basis, unlike within a traditional classroom. This pedagogical approach is also more conducive to supporting differentiated learning whilst allowing the teacher to deal with mixed-ability classes. This pedagogy is more amenable to situations where there is a dearth of teachers or where their levels of education and training are low.

Homework

Unlike a traditional classroom, the ABL approach emphasises learning without the burden of homework and without assessment through intimidating tests and examinations as they would have faced in a traditional classroom setting.

Classroom Geography and Management

The physical structure of an ABL classroom is also very different from a traditional classroom with the former featuring low-level blackboards that can be easily accessed by children, learning mats that children would be seated on depending on the competency they are engaging in and finally, a teacher who mingles on a low stool or seated on the floor, instead of stood or seated at the front of the classroom whilst lecturing. These processes are meant to be more conducive for learning through peers, allowing teachers to more subtly assess a child’s progress whilst at the same time ensuring that the child learning is specific to their own needs and requirements. The ABL approach was adopted in Tamil Nadu initially in 13 schools in Chennai in 2003 before being rolled out in a phased manner across the entire state for all children studying in grades 1-4 in all government and aided schools by 2007-2008.

Research Questions

This study will analyse the political economy of the agenda setting, design, implementation and subsequent scale-up of ABL as an example of an apparently successful education reform. The study provides a narrative with an analytical writing style, set within appropriate theoretical frameworks. The areas of focus include the 4 aspects of reform:

- **Agenda Setting and Design:** Historically, who set the agenda for reform? How did they go about doing it? Who were the critical champions of change that made it possible and what were their levers to shift key decisions? What were the drivers and barriers to reform? What was the role of the traditional and new media in securing popular support? How were obstacles to reform anticipated and addressed in the design? How is ABL placed in the context of larger educational reforms in the state? Discussion here includes political leadership as well as key administrative functionaries within the SSA Office driving the reform.
- **Implementation & scale up:** Were there critical turning points in the implementation of the programme, if so what were they? How did it help to generate and sustain buy-in for the programme as it expanded? What were some of the considerations of the SSA State Office as it moved from 13 schools in Chennai in 2003 to all 35,000 government and government-aided schools by 2007? What are some of the key features of the reform process that made scale-up viable and sustainable? How were key stakeholders including teachers, teacher-educators and communities / parents and children engaged in the process? Whether and how were teacher unions engaged in the process of implementation? How was the programme development/implementation financed? Was getting adequate funds a challenge? If so, how was that overcome? What kind of advocacy surrounded the programme scale up? Was the media involved in the process, if so how?
- **System-wide Change and Support:** What system-wide changes accompanied the shift to ABL (i.e. teacher recruitment and deployment, teacher training, teacher support, assessment regime, curriculum change)? How are teachers trained to deal with paradigmatic shift in pedagogy?
- **Sustainability:** How sustainable is ABL in the long-term? Is it entrenched in the school system? Has support waxed and waned over time? How has the Tamil Nadu state SSA office developed and nurtured a reflective culture (since implementing ABL, the State office has commissioned multiple external evaluations of the programme)? What has led to sustainability or lack thereof?

This Study

Given that India faces high levels of corruption, limited political will for reforms, and politicised bureaucracies, the successful implementation of the far-reaching educational reform of ABL in Tamil Nadu is a unique triumph story. This paper aims to deconstruct this success story in order to understand the political reasons behind the effective agenda setting, implementation, scale-up and sustainability of ABL.

There are two important features of ABL. One is that it represented a shift from the traditional behaviourist way of teaching prevalent in India to a social constructivist paradigm. While in the former, pedagogy was *language* driven and hence disadvantaged those with lack of the 'educated' language skills, in the latter paradigm *activity* took the central pedagogical role, thus arguably providing more inclusive education as well as promoting learning with understanding, with opportunities for self-learning, peer-learning, group work and whole-class activity.

Secondly, ABL provided a solution to the multi-grade classes¹ and inadequate staffing dilemma, as the system provides learning material that several children can work on while the teacher is busy with one group. In theory, thus, ABL implementation appeared to be the solution to the elementary education problems of the state.

However, such paradigm alteration requires not only materialistic amendments to pedagogy and teaching through syllabus materials, but also modifications in the behaviour of all the actors involved including the students, teachers, and parents. A few studies do concentrate on this very political economy aspect, with particular focus on the political economy of the scale up and sustainability of the model.

2. Key findings from past literature

One such paper that focuses on *scale up within the state* of Tamil Nadu is the World Bank and European Commission Report (2008). According to the report, the State not only addressed all elements of the quality support chain, but also made innovative use of finance available through SSA (including teacher grants, teacher training, Learning Enhancement funds). The report positively highlighted the experience and role of block resource teachers (BRT), and the training of the teachers. However, when talking about the *sustainability* of the model, the report took a more cautious tone stating that “the sustainability in terms of political will, resources, motivation and social pressure will need to be strategically thought through.” The report stressed tuning teacher training with changing classroom philosophy, larger buy-in for the private sector, and inclusion of state nodal agencies like Directorate of Teacher Education Research and Training (DTERT) and District Institute of Education and Training (DIET), in order to achieve sustainability.

Broadly positive findings, the NCERT 2011 report’s threefold evidence suggested that ABL was not fully implemented as intended. Firstly, though teachers stated that through training they felt competent in ABL methodology, evidence suggested poor participation, attendance and cooperation from the teachers during training. The report also highlighted teachers’ perception of parental dissatisfaction with ABL and teachers’ resistance in accepting the new ABL methodology due to ambiguity with regards to understanding self-learning material, use of ABL cards/supplementary materials, purpose of teacher cards and sequence of activities. Secondly, a large 44% of teachers felt the need for additional teaching-learning materials, with some teachers reporting personal expenditure for the procurement of the additional materials. Lastly, the NCERT team witnessed limited awareness of parents, VEC and community members with regard to how ABL differs from regular schooling in terms of non-usage of textbooks, self-assessment instead of examination and lack of homework.

A third report, by Anandalakshi (2007), offered a historical analysis and prediction that though the *state-wide scale up* was successful, the *nationwide scale up* of the system would be conditional on i) the openness to change of teachers, trainers and supervisors, ii) administrative machinery and clout, and iii) political will and financial support.

From these studies one can construe that the analysis of the political economy journey of ABL in Tamil Nadu in terms of state-wide scale up, the subsequent sustainability and the potential nationwide scale up has so far been debatable, and thus a fresh evaluation is needed. Our research

¹ ABL method rests on an integrated Grades I-IV structure in a multi-grade classroom organization, enabling both vertical and horizontal groupings within the classroom.

aims to provide this evaluation. In addition to scale up and sustainability, this research also analyses the *agenda setting and design* and *system-wide change and support* features of the ABL implementation process.

Furthermore, the ABL implementation journey provides an instructive reflection on the political economy of school reform. The lessons derived can inform not only other Indian states that are implementing the system or one of its derivatives, but also more generally provide practical guidance on specific aspects of school reform - the 'X' factor, so to speak, that sits outside the programme design (i.e. outside curriculum, pedagogical design, training programme) but includes other often intangible aspects of the elusive 'process' of reform such as leadership, managing stakeholders (including teachers' unions) and securing buy-in, community participation, understanding the phasing or sequencing of reform, innovative financing, continuous monitoring and evaluation, and building sustainability.

Importantly, this study seeks to capture how the inertia of the status quo was overcome – to include understanding the key stakeholders, the strength and nature of their influence on reform, how impediments to change were dealt with and what strategies were deployed in the process of change.

3. Methodology

The study is based primarily on a twofold analytical methodology. The first part of the methodology comprises of a historical analysis of the ABL implementation process in Tamil Nadu in order to generate a conceptual framework. By deconstructing the story behind the political economy of ABL, we aim to develop a theoretical framework that can explain successful educational reforms. In order to do so, we interviewed various **stakeholders** (those involved during ABL scale up as well as those that currently hold office), undertook a teacher opinion survey and analysed secondary literature.

We elicited the representative view within each stakeholder group in the following way:

- 'Government' is represented here by the few education policy makers in the state and, as such, we aimed for complete coverage rather than drawing a representative sample. Hence, we interviewed not only those persons that currently hold offices, but also those who played key roles during the implementation period of ABL (in 2006 when the state-wise scale up took place)². The officials interviewed include:
 - 1) Former State Project Director (2006), Mr Vijay Kumar
 - 2) State Project Director, Mrs Pooja Kulkarni
 - 3) Joint Director of Elementary Education, Mrs N. Latha (Joint Secretary of SSA in 2006)
 - 4) Director of School Education, Dr S. Kannappan (Director of SCERT in 2006)
 - 5) Consultant, SSA, Mrs R. Malathy (Consultant, SSA in 2006)

For lower level education functionaries (DIET principals and District Education Officers) as well as teachers and parents, we conducted our interviews within the same districts as those chosen for the pedagogy component. Whilst these districts may not be representative, they were illustrative.

² It is worth noting that those individuals who held important offices during the implementation period in 2006 still hold prominent offices.

- Since teachers are a large group, we spoke to senior leaders of the government elementary school teachers' association of Tamil Nadu, as the most relevant representatives of teachers – both current office-holders of this teacher union, as well as their counterparts at the time of the introduction/scale-up of ABL. In addition, to complement this 'macro view' from Chennai, we also undertook a survey of teachers and undertook focus group interviews with the Head Mistresses and teachers of the 10 Government and Aided schools in the districts of Chennai and Kanchivaram, as well as with teachers / Principals of nearby matriculation and private schools.
- For parent perspectives, we contacted parents of sample government and aided schools and, in addition, also spoke to parents of nearby private schools.

We did descriptive statistical analysis of a range of parameters including student enrolment, teacher salaries and per pupil expenditure before and after ABL scale up so as to aid and substantiate the conceptualized framework.

4. Theoretical Rationale for the ABL Success Story

In the Indian setting, Tamil Nadu's ABL programme was a successful anomaly from the political economy lens. ABL was not only effectively *designed*, but the reform was also successfully *implemented* and *scaled-up* as per the design, albeit with some resistance, as highlighted already by the NCERT 2011 report, a resistance that will be addressed in more detail in the later sections of this paper. Furthermore, this educational change was advanced by an apparently smooth *system-wide change and support* in terms of teacher training and curriculum change. To add to this, this ABL reform has withstood the test of time, being *sustained* over the past eleven years, even with the state government changing three times in the given period. Evidently, the implementation and execution of this educational reform was a success in Tamil Nadu, unlike such attempts elsewhere (including Puducherry where ABL lasted only for two years). The question that arises is, what makes the Tamil Nadu story different?

There are few theoretical conceptualization of educational change including Michael Fullan's Educational Change model (1982, 1991) in which he proposes four broad phases in the change process: initiation, implementation, continuation and outcome. However, the Tamil Nadu story does not provide the practical underpinning to Fullan's concept. The theoretical rationale that comes closest to explaining Tamil Nadu's overall ABL execution phenomenon is Archer's (1981) useful conceptual piece distinguishing three types of educational politics. The first type is broad educational politics: attempts to impact the inputs, processes and outputs of education, through legislation, union action, pressure group action, innovation and propaganda. The second type is high educational politics: the analysis of interpersonal relations at government level. The third type is the politics of aggregation: the sum of individual decisions to take a certain action, such as going to school, applying for university, etc. Using this framework, Archer (1981) highlights three types of transactions. The first transaction is internal initiation by education professionals. In other words, change is introduced from within the education system by education personnel, possibly in conjunction with pupils or students. This type includes both small-scale personal initiatives in a particular institution and large-scale professional action. The second type is external transaction, which involves relations between internal and external interest groups. This type of transaction is usually instigated from outside education by groups seeking new or additional services. A third type of transaction is political manipulation by political groups. This form of negotiation arises when

education receives most of its resources from public sources. These three forms of negotiation add up to a complicated process of change. The successful implementation of a change as big as ABL in Tamil Nadu is a complicated mix of these three transactions. A productive first transaction of internal initiation resulted in a good agenda design and set up, an effective second transaction involving internal and external interest groups paved way for successful implementation and scale up, and a positive third transaction involving political manipulation led to further scale-up accompanied by system wide changes. Our team, in this research, has further addressed certain initial conditions that bred a pro-educational reform mentality in Tamil Nadu as well as proposed a fourth transaction to explain the sustainability of the ABL programme. The summary of the framework is provided in the figure below along with a timeline of key events.

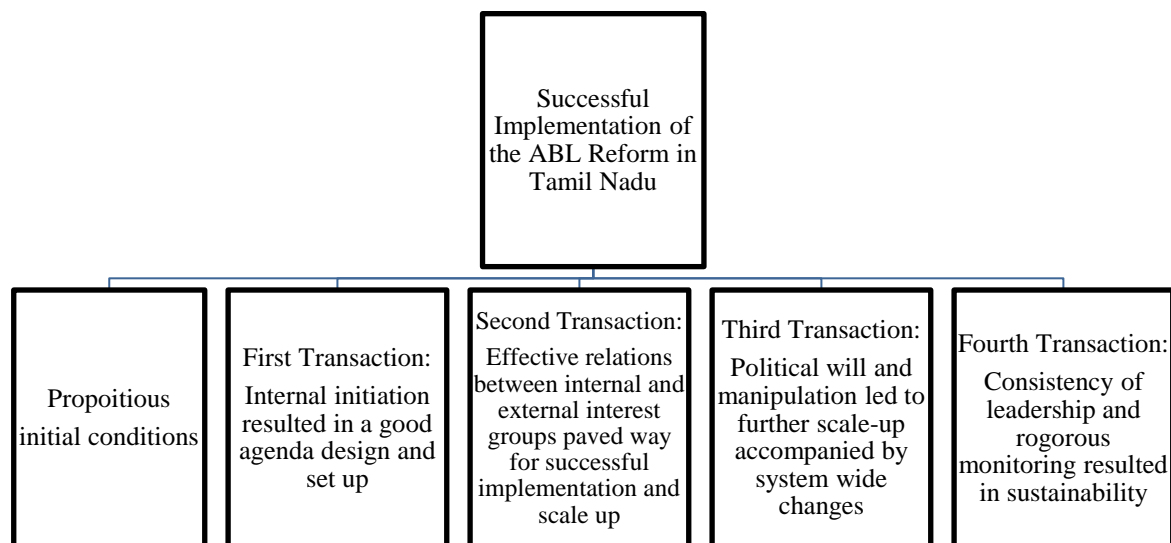


Table 1: Timeline of Key Events

1993	MP Vijaykumar, the Collector of Vellore District, gathered a team of 20 educationalists to create a bridge programme called Child Labour Abolition and Support Scheme (CLASS). The aim of the team was to find a student-centric pedagogy that will encourage children involved in child labour to come back to school.
1993	The trainers and teachers of CLASS programme visited Rishi Valley School where they came across the extraordinary <i>ladder</i> methodology. Parts of this methodology was adopted for the CLASS programme.
1993-1994	The pedagogy was extended from CLASS scheme to a few regular government schools in Vellore under the name 'Joyful Learning'
2003	MP Vijaykumar became the Commissioner of Chennai Corporation. He formed a forum of primary school teachers and members of District Institute of Education and Training (DIET) for the purpose of assessing textbooks and course materials in order to modify them in accordance to the Rishi Valley pedagogy. The ABL programme was therefore designed.
2003-2004	Schools in Chennai were requested to adopt the ABL method on a voluntary basis, with 13 schools agreeing to get trained as pilot schools.
2003-2006	ABL was scaled up to all 264 schools in Chennai.
November 2006	MP Vijaykumar became the State Project Director (SPD) of Sarva Shiksha Abhiyan (SSA), gaining clout over all the 35,000 government and aided schools of Tamil Nadu.
December 2006	Mr. Thangam Thennarasu, the School Education Minister, was taken to some ABL-following primary schools of Chennai. After witnessing the benefits of the pedagogy, he issued a Government Order compelling all government and aided schools in Tamil Nadu to adopt ABL as the teaching pedagogy in primary education.
December 2006- April 2007	4000 cards of different dimensions for ABL teaching were printed and distributed.
2006 - 2008	ABL was scaled up to all 35000 government and aided primary schools of Tamil Nadu.

4.1. First Transaction: Internal Initiation for ABL Design and Set Up

*“The fact that children were not learning was haunting us. A lot of children were in child labour. When we tried to put them in school they dropped out. Reason: classroom was not interesting to them. Why were the children not staying in school, and not learning? Since we were a team of teachers, we knew the exact problem. Schools and classrooms were provided for, children had potential, teachers taught well, and books were free of cost. The problem was in the **process**.”*

(M.P. Vijaykumar, 2015)

The idea of ABL originated in 1993 when one Mr M.P. Vijaykumar, the then Collector of Vellore district, gathered around him a team of 20 teachers who wanted to produce student centric pedagogy. All through his career as a government servant in various capacities, whether as a P.A. to Chief Minister or Collector of a district, Mr Vijaykumar had shown a special interest in school education. When asked what made him take education related initiatives his answer was simple and modest, “As a public servant I am paid to make schools run effectively. If all indicators show that the learning level of children is only 50% then 50% of my salary is a waste! I just did my duty as an officer”.

During his tenure as Collector of Vellore district, he noticed several children of the school going age attending the adult education programmes, such as Arivoli Iyakkam and Ariviyal Iyakkam (TNSF). These adult education programmes employed activities such as songs, dance and drama to mediate education. A more detailed account of the identification of the problem of child labour, and its subsequent perpetuation into the introduction of ABL is provided in Section 4.1 of Report 4. Furthermore, he noticed children working in the factories in that area. In order to bring these children back to school, he initiated a bridge programme called Child Labour Abolition and Support Scheme (CLASS) funded by UNICEF. He brought in 20 experienced teachers like Mr. Shanmugam and Mr. Pitchaiah of Vellore district (who eventually formed the team that initiated ABL). They were not only schoolteachers but also active volunteers in Arivoli Iyakkam and TNSF, and had experienced the different pedagogical methods.

The trainers and teachers of CLASS programme visited Rishi Valley School where they came across the extraordinary *ladder* methodology. Mr Vijaykumar and the teachers immediately struck a chord with this pedagogy and believed that the solution to Tamil Nadu primary school problems lay here. Though they did not adopt the entire Rishi Valley methodology for their CLASS programme (since the methodology called for restructuring of classrooms and textbooks), they did adopt selected activities. This CLASS programme was conducted in government school premises. Consequently, regular government school students got an opportunity to observe these classes and were attracted to its activity based teaching methodology. This in turn led to the teachers of the regular government school programme bidding to have similar training with these innovative methods. This was the birth of the “Joyful Learning Method” in Tamil Nadu schools.

However, the training was limited to teachers and not supported by restructuring of the classroom or the textbooks, which remained unchanged, hence becoming a massive limitation in the effective execution of “Joyful Learning”. Nevertheless, the implementation of this programme made two things clear to Mr Vijaykumar’s team of teachers:

- 1) The problem of scarce learning and poor attendance had little to do with the children’s aptitude, interest and capabilities. Poor learning and results were also not a consequence of poor teaching materials or mediums since teachers were qualified, books were free of cost and classrooms were provided for classes in regular primary schools.

- 2) An activity based, student centric and learning (rather than teaching) centered methodology, such as the *ladder* methodology of Rishi Valley, was needed to solve the elementary education problems in Tamil Nadu.

Subsequently, in 2003, when Mr Vijaykumar became the Commissioner of Chennai Corporation, he formed a forum of primary school teachers and members of District Institute of Education and Training (DIET) for the purpose of assessing textbooks and course materials in order to modify them in accordance to the Rishi Valley pedagogy. Every subject was redesigned to incorporate activities, and the classrooms were theoretically restructured to become more democratic and vibrant. Axiomatically the theoretical design of ABL was created by this team of primary school teachers and DIET members, led by Mr Vijaykumar.

Therefore, the internal initiation of the change was productively undertaken by the educational professionals themselves, who were not only aware of the problems, and subsequently created the solution, but also had experience of different pedagogical methods. Since teachers were the architects of the ABL pedagogic design, they formed the first transaction for successful change.

4.2. Second Transaction: Relations Between Internal and External Interest Groups for Successful Implementation and State-wide Scale Up

“Lots of counseling, convincing and talks finally led to acceptance”

(S. Kannappan)

The Archerian conceptualisation of change proposes that for a fruitful implementation of a given educational reform design, effective negotiation between all interest groups, both internal and external, is required. It is through these effective negotiations that resistance to change can be overcome.

In the case of pre-ABL Tamil Nadu, the stakeholders constituting the internal interest group included teachers and parents of children enrolled in primary government and aided schools, while the external interest groups included the government (at the elementary education level as well as the state level), teacher unions and ABL trainers³. Apart from these positional stakeholders, a key patron of the educational reform was Mr M.P. Vijaykumar, whose stake had more to do with his interest in the educational reform rather than his official positions (which changed various times, from Collector of a district to Commissioner of a district to SPD, throughout the reform period in order add momentum to the ABL implementation).

The relationship approach undertaken by Mr Vijaykumar to get the key participants on board was a complex mixture of a top down and bottom up methods. With the realisation that hierarchy matters

³ Generally, the publisher of textbooks is also a relevant external interest group who can have reasons to resist a particular educational reform. In the case of ABL, publishers of textbooks would fear losing business. However, in the case of Tamil Nadu, the publisher of textbooks is a government entity Tamil Nadu named Textbook and Educational Services Corporation (and not a private publisher who could have lost business). The Corporation functions under the governance of the Board of Governors constituted by the Government of Tamil Nadu. Therefore, a shift towards the ABL methodology was not problematic as far as publishing was concerned since the state government and DSE continued publishing the textbooks through the Corporation with the MHRD and state funds, while the SSA funded the publishing of ABL specific materials like cards, ladders and logos.

in India, he ensured that he got the official positions required to disseminate his pedagogic design all over Tamil Nadu. This top down approach took its first leap in 2003, when Mr Vijaykumar became the Commissioner of Chennai Corporation. The position brought 264 government and aided schools of Chennai under his authority. The second major leap took place in 2006, when he became the State Project Director (SPD) of Sarva Shiksha Abhiyan (SSA), gaining clout over all the 35,000 government and aided schools in the entire state of Tamil Nadu. However, upon establishing his authority, he chose an autonomous bottom up relational approach – a process with active participation from the bottom tier of the administrative hierarchy.

The Administrative Core Team of Education Professionals

The top down relationship approach, which formed the first step of implementation and scale up, required Mr Vijaykumar to have a strong core team. He ensured that this team comprised of those education professionals who had aided the ABL agenda design and set up stage. During the state-wide scale up, he expanded the team to include teachers of Chennai corporations schools, where the programme was first piloted.

Furthermore, Mr Vijaykumar had commendable working relationship with educators like Amukta Mahapatra and Prof. Anandalakshmi. He gathered teachers from the Krishnamurthi Foundation School in Chennai and vigilantly chose his own team in the SSA. The Joint Directors, Ms. Latha, Dr. Kannappan and Mr. Elangovan were all extremely enthusiastic about school education. The consultancy team included Mr. Shanmugam and Mr. Patchiappan (from Vellore), Ms. Malathi (an experienced and enthusiastic retired Headmistress and Education Officer of Chennai Corporation), and Mr. Rathnavel (from DTER). The diversity of this team in terms of teaching experience, educational theory and administrative experience was unified through their enthusiasm and energy. The success behind the implementation and state wide scale up of the ABL reform is largely explicable by the accumulation of this strong team, as well as Mr Vijaykumar's relationship of engraining confidence on the members.

Teachers

The initiation of the active bottom up relationship approach, which formed the second step of implementation and scale up, started with getting the teachers on board. In order to achieve an active learning environment, there was a need for teachers to understand through experience what an active learning environment really is. However, most of the teacher training programmes themselves were instruction-oriented and students of this training, who were the future teachers, were passive recipients of knowledge. This contradiction was thoroughly understood by the patrons of ABL. With the help of Ms. Amukta Mahapatra of SchoolScape, a Chennai based NGO working in the area of professional development of teachers, these patrons developed a new method of training in an active and participative manner. This attempt not only established a new training method for the teachers but also paved way for the realization that such training was possible on a large scale (Krishnamurthy, 2010).

Upon becoming the Commissioner of Chennai Corporation, Mr Vijaykumar gained the authority to scale this training effort to all the corporation schools in Chennai. School managements were requested to experiment the ABL method on a voluntary basis, with 13 schools agreeing to get trained as pilot schools. The teachers from these 13 schools visited Rishi Valley to observe the process for themselves, becoming the second set of team from Tamil Nadu to visit school. Consequently, they learnt it actively rather than passively via instructions from trainers. This dynamic learning enabled the teachers to adapt the methodology in their environments with limited struggle.

The effort was then scaled up to all the 264 schools in Chennai. The core administrative team expanded to include teachers from the 13 schools to create course material in tune with the ABL methodology, and further train the teachers of the remaining Chennai Corporation schools. It is worth noting that the efforts for restructuring the course material were also largely taken by schoolteachers, further reiterating the positive first transaction for successful change.

By destiny or design, Mr Vijaykumar became the State Project Director (SPD) of Sarva Shiksha Abhiyan (SSA), and gave the final push to his efforts of implementing ABL by scaling it up to all the corporation schools of Tamil Nadu. Model schools were selected from each block⁴, whose teachers got the initial training. These teachers were all brought to Chennai, at government expense, and trained. In turn, they trained the remaining schools of their block.

Almost all the officials that our team interviewed conceded that the primary resistance to ABL implementation came from the teachers. Mr R. Venkatesan, former State Project Director of SSA in 2009, identified the complexity of the ABL methodology as the primary reason for the skepticism of the teachers “It seemed to them full of complexity in contrast to the traditional textbook based lecture method.” However, all interviewees credited the active participatory approach taken by the core team to train the teachers, as well as to Mr Vijaykumar’s emboldening relationship with them, as a prominent factor behind quelling most, if not all, of the resistance.

The elements of doubt around ABL disappeared as the teachers got used to the new pedagogy through their active training (though the transition was not smooth). Even our team, being visiting observers, felt slightly puzzled on our initial visits to the classrooms. The presence of learning ladders, activity cards, graded materials, unconventional sitting arrangements, and multi-level groupings in a classroom that combines two or more grade classes (e.g. grades 1 and 2; 3 and 4) can appear to be a bit chaotic at first sight to outsiders. More so to the eyes of those who are used to witnessing a classroom environment whereby the teacher stands in front of the class lecturing from a book and the children passively listen. Thus, teachers, with all rationality, would have had tremendous problems adapting to the new methodology, had the training not been an active, participatory procedure. The training procedure and the relationship of the core team with the teachers played a huge role in subduing resistance. The team not only introduced this large scale reform to the teachers, but also consistently supported the teachers to continue the programme by being very accessible. For instance, the cell phone numbers of all the members of the core team were published and teachers were encouraged to call them at any time.

According to a Head Teacher of a Corporation School in Chennai (in Dey & Siddiquee 2010), “it took quite a while and conscious efforts to get used to the new mode of schooling. We gradually realized that young children are very animated and conscious about their role.” Ms. Vijayalakshmi (in Krishnamurthy, 2010), a primary school teacher of Manthope School in Saidapet, stated that Mr Vijaykumar would bring higher tier government officials to show them the teachers’ work. He encouraged the teachers to first get trained themselves, and then further train the rest. Such efforts not only inculcated pride in the teachers, but also engrained in them a sense of ownership of the reform, hence subduing feelings of resistance towards ABL.

State Government

⁴ Developmental administration of Tamil Nadu is carried out by Panchayat Unions or blocks in rural areas of Tamil Nadu. Number of blocks in each rural district depends on the size of the district and ranges from 4 to 22. In urban areas, the governance is done by municipal corporations, municipalities or town panchayats based on the size of the district/ town.

By 2007, the time had come to switch from the bottom up approach that enabled schools to voluntarily decide whether they wanted to adapt ABL or not. Thus, the third step of implementation and scale up involved switching back to the top-down approach.

By this time, the members of core team propagating ABL already held important positions in the SSA and SCERT, including that of State Project Director (held by Mr Vijaykumar himself). Evidently, the government at the elementary education level was already pro-ABL. It was the government at the state level, particularly Mr. Thangam Thennarasu, the School Education Minister from 2006 to 2011, that needed to be brought on board in order to achieve a full-fledged implementation without resistance.

According to Mr Vijaykumar, political will has to be generated through persuasion and evidence. Thus, in order to create political will, the patrons of ABL first used the line of persuasive conviction by using certain influential taglines (“*if you want your name to go down in history then spreading ABL to the state is the way forward*”). This was followed by trips to schools so that the minister could observe the classrooms, teaching and the consequent learning.

Mr Vijaykumar recalls that with each trip, the Minister would get impressed with the pedagogy. However, the immediate cause for his approval was his meeting with a student named Gayatri. She was asked by the minister to put sticks on 2 on the skiddle board – an activity tool for teaching counting in maths. She did the required. She was then asked to put sticks on zero, to which she replied with a series of questions. ‘Can you touch your ears twice?’ The minister and Mr Vijaykumar touched their ears. ‘Can you touch your nose once?’ The minister and Mr Vijaykumar touched their noses. ‘Can you touch your head zero times?’ The minister and Mr Vijaykumar impulsively and involuntarily put their hands on their head. As soon as they did that, Gayatri responded by questioning their action considering zero has no value. This incident was the tipping point for the minister who then decided that ABL must be implemented in all the government and aided schools of the state. Consequently, a Government Order was issued compelling all government and aided schools in Tamil Nadu to adopt ABL as the teaching pedagogy in elementary education.

Mr. Ravi Kumar, MLA, Viduthalai Chiruthaigal, who accompanied the education minister to the school trips, likened this ABL reform to fundamental social transformation. It is this convergence of administrative will with political will that made possible such a significant reform implementation on such a large scale in such a short period of time.

Parents

Though parents are key stakeholders, they were not involved in the implementation and scale up process. The headmistresses of the sample schools interviewed for this study conceded that parents were informed about ABL by the parent-teacher associations and the school faculty once the methodology was in practice in the schools. The headmistress of the rural PUPS Nandivaram Government School stated that though parents were informed post-implementation, the adoption of ABL did not influence their choice of school since “pedagogy isn’t the primary concern for parents who send their children to government schools as financial barriers deter them to pick a private alternative.” One would assume that there must have been some resistance to a sharp departure from previous methods not least as it may not yield the same measures of learning parents use (e.g. ability to recite songs/poetry at length). However, from our interviews, we gathered that this was not the case since parents prioritized affordability and proximity from their household over teaching methodologies.

We interviewed a sample of 28 parents with children in rural and urban government schools about

their knowledge of ABL before their child's admission, to which 100% rural located and 69% urban located parents admitted that they had no prior knowledge of ABL. The entire sample, interviewed individually, divulged that pedagogy and pedagogical changes like ABL do not dissuade them from sending their children to the government schools due to two reasons:

- i. They do not have a choice to enroll their children to private schools as they lack the required means.
- ii. They do not switch from ABL as pedagogy preference is not high on parents' priority list. Factors such as affordability and proximity of school are more important considerations.

One way of gauging parents' response to the ABL methodology is the answer to the parental preference question in our teacher perception survey. On being asked whether parents like the ABL better than conventional teaching methodology, 88% teachers stated that parents prefer ABL, suggesting that parents that continue to send their children to government schools were not, and are not, a hindrance for ABL implementation and sustainability.

To corroborate the interviewees' accounts, we examine trends of student enrollment in government primary schools as a percentage of total primary enrollment from 2003 (and considering 2005 as the year pre scale-up) till 2014 (the latest year for which DISE data are available), in order to understand parents' revealed preference. This shows a long-term increase in the private schools' share of total enrolment, and thus a corresponding long-term decline in the government schools' share of total primary enrolment. Focusing only on the period from just before ABL scale-up (2005-06) until the year 2011-12 shows that government school enrollment in Tamil Nadu declined 14 percentage points, from 60% in 2005-06 to 46% in 2011-12, though it increased to 50% in 2013-14. While the data row for India in the same table shows that the entire country has faced a reduction in government school enrollment, with the rate falling 8 percentage points from 82% in 2005-06 to 74% in 2013-14⁵, the extent of reduction in government school enrolment in Tamil Nadu is higher than that in India. While this may be interpreted as suggesting that the ABL programme has not engendered greater parental confidence in the quality of the government schooling system, one must keep in mind that the movement towards private schools is a long-term and India-wide phenomenon. Therefore, this move towards private schools possibly has more to do with other reasons such as parents' desire for English language teaching or for a peer group from higher socio economic groups for their children, rather than the teaching pedagogy such as ABL.

A noteworthy point to note is that while the government school enrollment in India continued to decline from 2010 to 2014, the figure for Tamil Nadu has interestingly increased from 46.3% to 50.2%. Thus, the introduction of the ABL methodology has perhaps been able to slightly arrest the decline in government school enrolment and the move towards private schools, hence corroborating the views of the teachers in our survey. One must keep in mind that the source for the enrollment figures used in this paper is DISE, in which aided schools are categorized as private schools (rather than government schools). If aided school enrollment were to be captured with government school enrollment (since ABL is implemented in both), then the figure for the latter will presumably be larger

⁵ Enrolment figures in school-returns data, such as DISE, may be unreliable because it has been suggested that failing/unpopular public schools have an incentive to exaggerate their student numbers in order to justify their existence, and therefore, the observed reduction in government school enrollment share might be understated in the DISE data. For example, the ASER household survey shows that the government school enrolment rate fell by 12.4 percentage points (from 80.5% to 68.1%) in India between 2006 and 2014, as against the 9.6 points seen in the DISE data. However, using ASER data for our study would be problematic since it only captures rural data.

Evidently, the core administrative team's drive for change, and their consequent relationship with the teachers and schools, based on participatory bottom up approach, played a crucial role in the successful implementation of the ABL design, with limited role of parents. The authoritative top down approach can be credited for the subsequent statewide scale up.

Table 2: Enrollment share of Government and Private Primary Schools

Year	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	Change 06 -12	Change 06 -14
<u>GOVT.</u>													
TN	67.5	63.6	59.8	58.6	55.5	51.5	47.7	46.3	46.3	48	50.2	-13.5	-9.6
India	85.4	85.0	82.8	82.5	82.7	81.9	80.3	78.5	76	74.3	74.3	-6.8	-8.5
Difference	-17.9	-21.4	-23.0	-23.9	-27.2	-30.4	-32.6	-32.2	-29.7	-26.3	-24.1		
<u>PRIVATE</u>													
TN	32.5	36.4	40.2	41.4	44.5	48.5	52.3	53.7	53.7	52.0	49.8	13.5	9.6
India	14.6	15.0	17.2	17.5	17.3	18.1	19.7	21.5	24.0	25.7	25.7	6.8	8.5
Difference	17.9	21.4	23.0	23.9	27.2	30.4	32.6	32.2	29.7	26.3	24.1		

Source: DISE, www.dise.in

4.3. Third Transaction: Political Manipulation for System-wide Change and Support

'Hierarchy matters in Tamil Nadu'

(M.P. Vijaykumar)

'In government sector, what your boss wants happens. So if the minister was on board, everyone followed – parents and teachers.'

(N. Latha)

Archer (1981) propagated that this third negotiation arises when education receives most of its resources from public sources. Therefore, this transaction played an extremely crucial role in the successful system-wide change caused by ABL as well as all the large-scale support it garnered in two ways:

- 1) **Political manipulation reduced opposition against the ABL programme:** Mr Vijaykumar was aware that political manipulation is required in order to implement a large-scale educational

reform, and, by design and destiny, he took official administrative positions that placed him on the higher tier of the hierarchy. This garnered him the clout needed to implement the designed changes to the pedagogy, curriculum and materials. Most importantly, this higher administrative position gave him the authority to subdue any resistance that prevailed even after persuasion. In the interview, Mr Vijaykumar conceded that 90% teachers and teacher union members of Chennai got impressed either by the ABL methodology itself or by the active training process. However, 10% still resisted, mainly because either they were satisfied with the status quo and found the change too complex, or they were old and did not like an idea of a vibrant classroom where teachers had to constantly walk around and sit on the floor. However, the remaining 10% abided by the change because *'They all knew that I am the Commissioner (2003) and SPD (2005), so they couldn't say no'* (Vijaykumar, 2015).

Any room for resistance left even after all the persuasion and SSA's authority, got removed once the State Education Minister became pro-ABL and a Government Order was issued. The Government Order removed any space for opposition.

Teacher Unions

From the establishment officers' accounts, one can construe that system wide change and support was initially garnered through the advertisement of the ABL pedagogy, which intrinsically was appealing in itself, and further emboldened through political will employed via a Government Order. However, ABL was a reform that required teachers to move out of their comfort zones and learn something new which would require more effort from them- not just once off but forever. Furthermore, certain requirements of the programme such as the requirement that the teacher should move around the class and sit on the floor raised health concerns for older teachers. Kingdon and Muzammil (2008) in their work *'A political economy of education in India: The case of Uttar Pradesh'* analyzed the state of education in the Indian state of Uttar Pradesh and highlighted the embedded role of teachers and teacher unions in the political system. They concluded that in UP, unions actively pursue demands through various strikes and other forms of actions, and typically oppose reforms that require teachers to do more work. Through the militant opposition of such reforms, the teacher unions almost always win.

This raises the impending question in the ABL study - how did the teacher unions, which are embedded in the political processes of educational reforms, accept, permit and support ABL in Tamil Nadu despite the fact that the methodology demanded more effort from them? Was there any opposition from the teacher unions and was there any political manipulation by the administration and government to steer the teacher unions' actions in Tamil Nadu?

There are four probable hypotheses to explain the implementation of ABL despite its consequence of increased teacher workload (note: the four hypotheses are not mutually exclusive).

- i. Teacher unions in Tamil Nadu are relatively weak
 - ii. Jettisoning ABL was not a priority in the list of teacher union demands
 - iii. The degree of opposition was low
 - iv. Majority of teachers genuinely believed that ABL was a good methodology
- i. *Teacher unions in Tamil Nadu are relatively weak:*
One proxy for the strength of the teacher unions is the representation of teachers in the state legislature. A factor that weakens the strength of teacher unions is the lack of an

Upper House in Tamil Nadu, which in other states has led to a culture of political activism by teachers⁶. The extent of representation of teachers in the Lower House as MLAs, is almost negligible (Table 2). Only 3 out of the 235 MLAs noted Education as their profession, of whom only one is a voluntarily retired teacher (the other two listed educational consultant and professor respectively as their occupation). Thus, only 1.3% of all MLAs in the Tamil Nadu legislative assembly are teachers at any level, compared with Uttar Pradesh for example, where 6.7% of the membership of the Lower House (averaged over the entire post-Independence period) has been made up of persons who describe their occupation as teaching and where, in some years, the percentage has been as high as 10.7% (Kingdon and Muzammil, 2013).

Table 3: Occupations of MLAs

Occupation	Number of MLAs	Percentage of MLAs
Agriculture	89	37.9
Business	50	21.3
Advocate	27	11.5
Agriculture and Business	21	8.9
Full-Time Politics	14	6.0
Social Services	6	2.6
Film (Actor, Writer, Producer, Director)	5	2.1
Doctor/ Surgeon	8	3.4
Agriculture and Real Estate	4	1.7
Real Estate	3	1.3
Education	3	1.3
Housewife	2	0.9
Agriculture and Advocate	2	0.9
Civil Engineer	1	0.4
Total	235	100

Source: assembly.tn.gov.in (2015)

A second proxy for gauging the strength of teacher unions is the salary of the teachers in Tamil Nadu relative to the salaries of teachers in other Indian states. When the central pay commission's recommendations are declared once every 8-10 years, the teacher unions in each state negotiate

⁶ See Kingdon and Muzammil (2013) for the case of Uttar Pradesh, where the presence of the Upper House (of which one-twelfth of the members have to be teachers) means that teachers are engaged in the process of MLC elections via the so-called teachers' constituencies.

salary levels with their respective state governments, and try to have the central pay scales applied to the state in *toto*. The success with which they are able to negotiate salary increases is thus one reasonable indicator of the relative strength of the teacher unions in the different states. Ramachandran et al.'s (2015) study of 9 Indian states shows that Tamil Nadu's starting teacher salaries and salaries after 15 years of experience are one of the lowest among all the nine states in the study. Even after adjusting for cost of living by using the Consumer Price Index for each state, we find that Tamil Nadu's salaries for new appointees and after 15 years of experience are still one of the lowest. However, the picture is somewhat unclear since Tamil Nadu's mean teacher salary after 25 years' service, i.e. among very experienced teachers, is among the highest across these nine states. Therefore, this proxy might not be definitive in describing the strength of Tamil Nadu teacher unions. Table 3 presents Ramachandran's data.

Table 4: Government primary school teachers' salary, across some Indian states

	CPI (as of November 2014)	Salary of new appointee	Salary of new appointee (CPI Adjusted)	Salary after 15 years	Salary after 15 years (CPI Adjusted)	Salary after 25 years	Salary after 25 years (CPI Adjusted)
Tamil Nadu	148	15,345	10,368	28,660	19,365	50,140	33,878
Karnataka (R)	147.9	18,794	12,707	26,098	17,646	33,672	22,767
Karnataka (U)	150.8	21,814	14,466	30,198	20,025	38,892	25,790
Jharkhand (R)	148.3	28,650	19,319	39,780	26,824	44,400	29,939
Jharkhand (U)	141.7	31,600	22,301	43,260	30,529	48,100	33,945
Odisha	149.4	14,031	9,392	26,659	17,844	27,347	18,305
Rajasthan	144.9	26,013	17,952	NA	NA	NA	NA
Mizoram	143.7	16,504	11,485	NA	NA	NA	NA
Uttar Pradesh	147.1	29,293	19,914	39,683	26,977	44,783	30,444
Punjab (R)	140	35,936	25,669	59,113	42,224	79,288	56,634
Punjab (U)	138.5	36,588	26,417	60,194	43,461	80,742	58,297

Source: Ramachandran, et al. (2015) for data on salaries, Labour Bureau and data.giv.in for CPI

A prominent reason explaining the apparent weakness of the Tamil Nadu teacher unions is the history of suppression of the state's trade unions by the government, particularly the tough strike-breaking action taken by the Tamil Nadu government against state government workers in July 2003 (the same year when the ABL programme was implemented in Chennai). The strike was the product of resistance by government workers to the erosion of pensions and other rights by the All India Anna Dravida Munnetra Kazhagam (AIADMK) state government. Workers lost benefits worth between 90,000 and 125,000 INR each, as a result of cutbacks over the previous two years, provoking a series of strikes and protests. In response, the Tamil Nadu government pushed through the Emergency Services Maintenance Act (ESMA), summarily sacked nearly 2,00,000 employees and

de-registered 26 trade union federations and 200 affiliated unions. This unprecedented attack was upheld by the Tamil Nadu High Court and the Indian Supreme Court, which dismissed the challenge to the ESMA law and declared that employees had “no fundamental, legal, moral or equitable right” to strike. After stating that strike action was “mostly misused,” they suggested that, for redressing grievances, employees should do “more work honestly, diligently and efficiently” to impress their employer.

Surely, if not definitively, the stringent quelling of the trade union left its mark in the years that followed. Since the ABL methodology was implemented and scaled up within 3 years of this strike suppression, one can understand why the teacher unions would not have opted for militant opposition/ strike against the methodology, regardless of any doubt or discontent among the teachers. The dominance of the government over the unions is substantiated by Mr Vijaykumar’s statement that *“some teachers associations did not understand ABL and its benefits initially. But the political will was very important to overcome such minor hurdles. Even though the teacher unions resisted, the political will was stronger and that mattered more.”*

- ii. *Jettisoning ABL was not a priority in the list of teacher union demands:* Though ABL increased the workload of the teachers, its implementation would only be hindered if the teachers and teacher unions prioritized it high on their list of agendas. High priority would translate into higher degree of pressure on the government to repeal the reform.

In our teacher survey, we asked our sample to pick three agendas that they would want their teacher union to take up with the government. From the sample of teachers surveyed, 24% selected the agenda of ‘changing ABL methodology’ as one of their three choices (Table 4). The age group of this 24% ranged from 30 to 55, with an average age of 44. Since the mean age of the entire sample is also 44, ranging from 28 to 59, we can construe that the teachers wanting a change in methodology are not necessarily the older ones. However, interestingly 83% of these 24% were from rural Tamil Nadu.

However, higher priority was given to other agendas including ‘more facilities for students’ (34%), insufficient basic infrastructure (30%), and salary increment (30%). The finding that roughly a quarter of all teachers opposed ABL in our survey of teachers accords well with the findings of our interviews with teacher union leaders in Tamil Nadu. According to Mr Murugan and Mrs Mangalam, Secretary and Women’s Secretary respectively of the Tamil Nadu Primary Teachers’ Association, the teacher unions of the state have militantly pushed for salary agendas through protests. However, “teachers understood the benefits of ABL for students. Therefore, though the pedagogy increased teacher efforts and 25% of the teachers resisted it, yet the teacher unions did not protest against it since 75% teachers supported it’. To address teacher concerns regarding the pedagogy, unions followed verbal negotiation technique with the government, to which the government responded with cooperative amendments. For instance, textbooks were reintroduced to supplement cards, and teachers of age and teachers with back problems were permitted to use chairs.

Table 5: Agendas that the Teachers want the Unions to take up with the Government

Variable	Obs	Mean	Std. Dev.	Min	Max
More facilities for students	50	.34	.48	0	1

Salary Increment	50	.30	.46	0	1
Better basic infrastructure in school	50	.30	.46	0	1
Change of ABL way of teaching	50	.24	.43	0	1
Fewer ABL cards	50	.16	.37	0	1
Too many non-teaching activities	50	.14	.35	0	1
Deployment of extra teacher	50	.14	.35	0	1
Insufficient number of teachers	50	.12	.33	0	1
Non-cooperation from students	50	.08	.27	0	1
Work environment (pension, school holidays)	50	.08	.27	0	1
Other	50	.04	.20	0	1
Insufficient teaching-learning material	50	.02	.14	0	1
Transfer and promotion	50	.02	.14	0	1
Salary not given on time	50	0	0	0	1
More/better ABL training	50	0	0	0	1

Source: Teacher Survey in Chennai and Kanchivaram

- iii. *The degree of opposition was low:* If few teachers resisted ABL, teacher union action against ABL would be limited and less belligerent. Administrative officials state that approximately 10% teachers resisted, while teacher union leaders concede that approximately 25% teachers resisted. Though 25% is a relatively substantial number, the degree of resistance was low. According to Mr P.K. Elamaran, President of the Tamil Nadu Teachers' Associations, "the level of opposition could be handled through negotiation rather than protests. The government did not even need to provide salary incentives to get us on board. We had a few concerns which we verbally addressed to the government, and the government in turn cooperated."
- iv. *Majority of teachers genuinely believed that ABL was a good methodology:* Most of the officers and the union members that we interviewed stressed on the fact that teachers were genuinely impressed by the innate methodology and believed it could improve student learning. Joint Director of Elementary Education, Mrs N. Latha, who was the Joint Secretary of SSA in 2006, stated that the 10% teachers who resisted were the ones who "*did not learn and understand ABL and were non-proactive*". Mr Vijaykumar and Dr Kanappan corroborated this by stating that the teachers who understood the methodology well and worked for the students (rather than for themselves and their self-interest) supported ABL enthusiastically because they believed that the methodology was beneficial to the students.

The teacher unions, which form a prominent part in the political process of education, were therefore on board with ABL implementation with only a few concerns and limited degree of resistance. The method of political manipulation adopted by the government to get the unions'

support was verbal negotiation, feasible compromise, and persuasion. An instance of this persuasion, as narrated by DSE Dr Kannappan, is that Mr Vijaykumar himself visited approximately 2000 schools across all the district of Tamil Nadu and 32 collectors in a period of 8 months. School visits were made in the morning to persuade the teachers, followed by meeting with collectors in the evening. The collectors would then influence all the schoolteachers in their respective districts.

- 2) **Political manipulation ensured the availability of funds for the ABL programme:** The support of the government brought with it funds necessary for the production of ABL materials including logos, cards, ladders, mats and restructuring of classrooms to have low level blackboards. The SSA funds were deployed for the ABL specific learning materials (cards, logos, and ladders) while the state continued funding amenities including textbooks, school bags, uniforms, teacher salary, training, and maintenance grants.

An analysis of the Tamil Nadu government budget allocation on school education as well as SSA per pupil expenditure on elementary education shows that public expenditure has increased continuously and strongly since the implementation of the ABL programme.

<i>Table 6: Tamil Nadu Government Budget for School Education</i>	
Year	Budget (INR in Crore)
2005-2006	4110.00
2006-2007	4811.81
2007-2008	7057.00
2008-2009	7852.00
2009-2010	9147.00
2010-2011	10148.00
2011-2012	13333.66
2012-2013	14552.82
2013-2014	16965.30

From Table 5 we can see that Tamil Nadu state government's school education budget allocation increased by 312 percentage point from pre-ABL 2005-2006 to post ABL 2013-2014. Given that total enrollment in the government schools has been reducing over time, per pupil state budget allocation has axiomatically increased.

Taking 2003-2004 as the pre-ABL base year, SSA per pupil expenditure more than doubled in 2007 when the programme was scaled up to the entire state. By 2014, per pupil expenditure has increased by a factor of 15, as seen in Table 6.

<i>Table 7: SSA Per Pupil Expenditure in Government Elementary Schools</i>					
Year	Approved Outlay (INR in Lakh)	Expenditure (INR in Lakh)	Enrolment	Per Pupil Outlay (INR)	Per Pupil Expenditure (INR)
	(A)	(B)	(C)	(A/C)	(B/C)

2005-06	49641.12	47724.23	5197684	955.06	918.18
2006-07	72267.18	56379.30	5084746	1421.25	1108.79
2007-08	82312.64	61493.60	4899895	1679.89	1255.00
2008-09	90264.20	84410.10	4610905	1957.62	1830.66
2009-2010	86230.90	78157.51	4460474	1933.22	1752.22
2010-2011	147941.36	119370.94	4273526	3461.81	2793.27
2011-2012	189142.46	116702.35	4226225	4475.45	2761.39
2012-2013	198718.72	110318.05	3913563	5077.69	2818.86
2013-2014	220992.29	216477.13	3858172	5727.90	5610.87

Source: SSA for data on Approved Outlay and Expenditure, DISE for data on enrollment. Our per pupil estimation might be marginally overestimated because outlay and expenditure data includes government and aided schools, while DISE enrollment data is limited to government schools.

Since SSA funds are deployed for ABL specific learning materials, the subsequent consistent increase in per pupil expenditure from 2007 can be attributed partly to the scaling up of the ABL programme, though a large part will also be due to the implementation of the Sixth Pay Commission salary scales for government school teachers in the state.

Evidently, a successful third transaction played a crucial role in enabling the system-wide changes that accompanied ABL implementation. It concretely finalised the implementation of the programme in all the government and aided schools across Tamil Nadu by not only quelling opposition but also by employing funds on the materials needed for this educational reform.

Thus, we suggest that the effective execution of a large scale educational reform like ABL was possible because the three transactions - a productive first transaction of internal initiation resulted in a good agenda design and set up; an effective second transaction of influential relations of all stakeholders paved way for successful implementation and scale up; finally, a positive third transaction of political manipulation led to further scale-up through teacher union support accompanied by system wide changes. However, Archer's conceptualization of successful change does not include an explanation for the sustainability of ABL. In the following section we propose a fourth transaction for successful sustainability of an educational reform: stringent monitoring.

4.4. Fourth Transaction: Stringent Monitoring for Sustainability

"ABL is here to stay. There is no scope of going back to traditional pedagogy"

(Mr P.K. Elamaram)

The ABL pedagogy garnered support in Tamil Nadu over the years. However, the same pedagogy only lasted for 2 years in the neighboring Puducherry. It is therefore of interest to analyse how, despite Mr Vijaykumar's retirement from his SSA position and a change in State Government, ABL managed to sustain over the years in Tamil Nadu. From our interviews with the teacher union

members, it became evident that they felt that ABL is here to stay and absolutely no support has waned over time.

One prominent reason for this consistent support and subsequent sustainability is that some key persons of the core team who initiated ABL implementation are still part of administration. Individuals who held important offices during the implementation period in 2006 still hold prominent offices. These include Dr Kanappan, Mrs Latha, and Mr Elangovan. While the former is now Director of School Education, the latter two are the Joint Directors of Elementary Education in Tamil Nadu. This consistency in senior leadership of ABL has ensured continuous bureaucratic support for the programme.

The other key factor for the sustainability of ABL, stated clearly by the current State Project Director, Mrs Pooja Kulkarni, is the stringent monitoring methodology adopted by the SSA. If ABL implementation is not monitored, teachers will have the tendency to use conventional methods of teaching, simply because that is convenient and easy. This would endanger the positive results that ABL is capable of achieving, endangering the sustainability of ABL. In order to avoid such a situation from arising, the SSA office has put in place robust monitoring procedures.

- At least twice a year, the state administration does review with the District Education Officers (DEOs). The DEO does review with block officers twice a month. The DEO is responsible to ensure that schools are visited and monitored (by the Block Resource persons) once a month (twice for poor performing schools). During these visits, schools are graded on a spectrum of A to D.
- Tamil Nadu ensures that the Block Resource persons are highly qualified B.Ed. graduates recruited through open competitive exams. Such merit-based recruitment, which has existed since the inception of the ABL programme, paves way for a culture where teachers respect them and listen to them as monitors. Moreover, such educated block resource persons themselves might believe in the strengths of ABL and work towards education improvement, ergo monitoring honestly and effectively.
- Moreover, to ensure that the programme is implemented properly, Tamil Nadu SSA does not restrict training to only the Block Resource persons. Even DIET people and other qualified teachers are taken for training.
- To further certify that the schools are indeed doing well, and the Block Resource persons are not merely overestimating their results, Tamil Nadu SSA cross checks with alternative data like the Summative Assessment Data. The rationale behind this is that great improvement in ABL should be accompanied by great improvement in summative assessment. The SSA office also has in place an Achievement Survey, which is competency-based assessment in classes 3, 5 and 8. Improvement in ABL Class 3 should be reflected by improvement in Achievement Survey assessment of Class 3.

Through these robust methods of monitoring, Tamil Nadu SSA office ensures that ABL is implemented as per design (which does get altered over time depending on feedback). By doing so, these education professionals confirm that pedagogy sustains effectively over time.

A threat for the survival of the pedagogy however is the teachers' displeasure with the increased workload. Though the union members interviewed suggested that the government has made amendments in order to appease the teachers and prophesized that there is no reverting back to traditional pedagogic methodology, yet our study shows that currently 24% of the teachers from our sample would like to raise the agenda of ABL methodology with the government (Table 4).

In order to understand whether the discontent arises from the teachers' execution of ABL, we asked

them to strongly agree, agree, partially agree, or disagree with the statements given in Table 7. By collapsing the four options to a 0-1 answer (with strongly agree, agree and partially agree equalling 1, and disagree equalling zero), we established that though 100% teachers stated that they are partially assured in their knowledge of ABL, 20% of these felt that they were not 100% sure. However, a more pressing issue is that 76% teachers felt that the ABL materials provided, such as cards and logos, are insufficient.

<i>Table 8: Teachers' Perception of ABL</i>					
Variable	Obs	Mean	Std. Dev.	Min	Max
I am not 100% sure about my knowledge of the ABL methodology	50	.20	.40	0	1
I am assured in my knowledge of ABL and teaching technique	50	1	0	0	1
I have no difficulties in implementing the ABL methodology as I am an expert in that methodology	50	.60	.49	0	1
I have difficulties in implementing the ABL methodology due to lack of teaching materials (Cards, etc.)	50	.76	.43	0	1
I send the ABL Achievement Report of students to their parents	50	1	0	0	1
I give regular feedback to the BRTE/ education officials about ABL materials	50	.98	.14	0	1

Source: Teacher Survey in Chennai and Kanchivaram

Through the open-ended question of our survey, teachers listed the demerits of the ABL methodology to include:

- Insufficient ABL materials, specifically logos and cards.
- Too much paper work and record keeping that takes away from teaching time
- Chaotic classrooms due to the methodology's requirement for a vibrant atmosphere.

Therefore, although stringent monitoring has helped sustain ABL pedagogy in the last 10 years, the Tamil Nadu government must address teachers' issues (specifically workload in terms of paper work that is expected from the teachers and insufficient teaching materials) to assure future sustainability of the programme.

5. Initial Conditions

One must keep into consideration that there were two eminent initial conditions that enabled the implementation of ABL in Tamil Nadu.

1. The pedagogical approach of learning through activities had seen a steady evolution in South India from the days of Montessori and Gandhi in 1930s to the activities of Rishi Valley Rural Centre in 1990s. The methodology had already been experimented in government schools in Andhra Pradesh and Karnataka in the last decade of 20th century. Since the pedagogy was already designed and practiced, Tamil Nadu simply had to modify the design and adopt it.
2. There existed a culture of educational movements in Tamil Nadu from as early as 1970s. The earliest large scale education movement in Tamil Nadu that was the adult literacy programme, Arivoli Iyakkam. This movement was designed in late 1970s to encourage adult learners to gain knowledge through familiar contexts. Arivoli Iyakkam brought together teachers and educators who participated as volunteers in a large-scale engagement, hence ingraining in them the knowledge of activity based methods.

The next big education movement was the people's science movements in the late 80s and early 90s. This was a South India wide movement, and was called Ariviyal Iyakkam (TNSF) in Tamil Nadu. It adopted song, dance, drama as the medium for transaction of science education.

Both Arivoli Iyakkam and TNSF were voluntary in nature and included people both from the teaching community/ educators as well as NGOs . The fact that political and bureaucratic setup of the state supported such movements highlights the pro-educational reform mentality that existed in the political spectrum of Tamil Nadu.

Evidently, there existed a pro-educational reform environment in Tamil Nadu, which got easier to pursue as an activity based pedagogic design was already established. Since the essential ingredients were already in place, all that the Tamil Nadu environment needed for the reaction to take place was a catalyst. This catalyst came in the name of Mr Vijaykumar (Krishnamurthy, 2010). Thus, the initial conditions have to be credited as fundamental factors behind the successful implementation of ABL in Tamil Nadu.

6. Conclusion and recommendation or the nation-wide scale up of ABL

From the ABL historical analysis, interviews and surveys, our team gathered that the far reaching ABL pedagogic reform, its scale-up and sustainability can be explained by a combination of factors. These factors, along with our assessment of whether they were particular circumstances unique to Tamil Nadu or whether they are replicable, are given in the table below:

<i>Table 9: Factors explaining the successful implementation, scale-up and sustainability of ABL</i>		
	Factors	Particular/ Replicable
1	Propitious initial condition 1: Availability of an already evolved and practiced pedagogic design that	Replicable

	addressed the key education problems	
2	Propitious initial condition 2: A saturated educational environment through various movements	Particular to Tamil Nadu
3	Catalytic help of UNICEF in funding CLASS	Replicable
4	Strong administrative core team	Replicable
5	Passion, commitment & interpersonal qualities of an influential bureaucrat, Mr Vijaykumar	Particular to Tamil Nadu However, if we ensure that bureaucrats are given positions in departments and areas of interest to them, and retain them in those departments, we can foster and utilise such commitment and passion.
6	Ability to get cooperation, including co-opting teacher union leaders	Replicable
7	Strong communication strategy used by Mr Vijaykumar and his team	Replicable
8	Opportunity for Mr Vijaykumar to serve in education department, given by different governments	Particular to Tamil Nadu Yet again, this can be replicable if all states ensure that officials contributing effectively to a department/ area are not transferred without their will. Such retention of bureaucrats in departments can ensure implementation as well as sustainability of reforms borne out of their interests.
9	Constructive and dynamic teacher training process that gave the teachers a sense of ownership of the	Replicable

	ABL programme	
10	Serendipity of Ministerial support at the right time	Particular to Tamil Nadu
11	Relative weakness of unions in Tamil Nadu given that at the timing of ABL reform, teacher unions had been weakened by the ESMA case	Particular to Tamil Nadu
12	Coherent, well managed, and phased roll out	Replicable
13	Government negotiation with teacher unions, feasible compromise, cooperative amendments	Replicable
14	Lack of opposition from parents due to limited awareness and lack of options	Replicable
15	Consistency of certain key personnel of the core team who initiated ABL implementation in the bureaucratic administration over the years	Replicable if the states ensure this
16	Strong follow-up, monitoring, judicious responsiveness to teachers' demands by SSA office	Replicable
17	External accolades, international interest championed by donors	Replicable

Evidently, the successful implementation, scale up, support and sustainability of the ABL pedagogy in Tamil Nadu was an amalgamation of several factors, listed in Table 8, surrounding Archer's three transactions – some replicable, while the others not. A charismatic, education driven senior bureaucrat of the name Vijaykumar in the right position was one of the most prominent factors for the successful implementation. Unfortunately, this cannot be replicated elsewhere. However, what can be replicated is the practice of retaining in place a bureaucrat who shows passion and commitment to improving a particular area of work of his/her interest, rather than frequently transferring out such IAS officers. Our team has therefore formulated a two-phase conceptualization for successful change that can be replicated. The first phase consists of three initial conditions, while the second phase constitutes of 4 negotiations.

Phase 1

For the implementation and sustainability of any pedagogical change in India (and other developing countries), three key initial conditions are required.

- 1) Availability of a pedagogic design that addresses the key education problems:
A surrounding where a pedagogic design (that addresses its key educational problems) has already been evolved and experimented with over time, will find it easier to adopt and implement the methodology. For instance, in the case of Tamil Nadu, the key problem was poor teaching methodology – the solution for which was activity based pedagogy. Since ‘activity based learning’ had already entered the educational discourse in parts of South India, it became easier for Tamil Nadu to promote it.
- 2) A saturated educational environment: An educational environment saturated with several small scale/ individual pedagogical methods and widespread education movements will be more willing to successfully accept a large-scale education reform like ABL because it reflects that a pro-educational reform mentality exists in the political spectrum.

Political will of politicians and high level bureaucrats: The will of the education related bureaucracy and government to bring about a change is absolutely mandatory, since hierarchy does play a crucial role in India. It not only pacifies resistance, but also ensures sufficient funds for such large-scale reforms. This will address the issue of low levels of ‘stateness’ propagated by Leftwich (Section 1), thereby enabling educational reforms. The relevance of this ‘*bureaucratic activism*’ for successful scale up is further discussed in Section 4.3 of Report 4.

Phase 2

In an environment where the above-mentioned initial conditions are in place, a fourfold negotiation is needed for the implementation of a pedagogic change:

- 1) For the state-specific design and set-up of an educational reform, internal initiation for change must take place from within the education spectrum.
- 2) For the implementation of the design, and scale up from pilot schools to the entire state, effective relationship between all key internal and external stakeholders must exist.
- 3) For removal of resistance, system-wide changes and support, and political manipulation by those in power is needed.
- 4) Finally, for the sustainability of the education reform, consistency of high-level bureaucrats, and robust and frequent monitoring must take place.

If India aims to seek a nation-wide scale up of ABL, it must ensure that the three initial conditions prevail in its states. Once these conditions are ensured, the states must then attempt to effectively undertake the four negotiations.

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