

A COOL BREEZE BLOWING IN SCHOOL EDUCATION IN TAMIL NADU

- an inversion of realities in the summer of 2007

2004 saw the tsunami wreak havoc in the coastal regions of the Bay of Bengal. Tamilnadu suffered, as did other states and communities elsewhere, on a scale they had never experienced before. Much relief poured in from around the world to alleviate the misery and distress. Many were moved to introspection and to examining if we were doing enough, and quickly enough for our less privileged brothers and sisters on this planet. The sense of urgency touched many nations and individuals.

In the state of Tamilnadu, for Government schools, the winds of change began blowing in 2002. Change is difficult and change people say, is slow. But sometimes, the alchemy of time, circumstances and human endeavours has a momentum all its own. There is a rapidity of movement, a direction and the possibility of ending some of the problems one has lived with for long, often too long. For a quick overview:

- The SSA took the Rishi Valley (KFI) Rural Education model in 2003, tested it, modified it to suit the TN schools, and then took the vertical age group structure to all its 37000 primary schools (grades 1 to 5) by 2007 in careful phases.
- The SSA took the Active Learning Methodologies in May 2007, based on the practices at The School (KFI), Chennai, and rapidly implemented it for all state upper primary classes, about 16000 in number, in grades 6,7,8 by early 2008.

What, Why and How

Reflecting on this determined movement brings to surface some important questions. How has so much movement happened so soon? What made it possible in Tamilnadu?

Private educational institutions seems to attract good teachers, and have facilities that are vastly better than those Government schools have. They are often in the news for innovations. Private endeavours, such as private industry or business, are expected automatically to be superior to the mass education attempted by the state system in a democratic nation. However, nothing seems to have changed that much. When one listens to experiences of schools in conferences and seminars, one hears of changes being rung in by some schools. However, few are replicated even within a school.

The truth is that there is a great paucity of replicable models, models seen by a large number as relevant, meaningful and easily transferable. The humane and sensible models that are practised in many schools, exist in context, and often vanish with the practitioners. This is the reason why private schools also have not changed that much in their pedagogy and structure. Change is wrought when the forces at work make the status quo redundant, an alternative **cannot be avoided** and when ideas are found, ideas whose time has come. This is a complex chemistry, but it is visible in Tamilnadu State education.

Private institutions run on the principle of 'niche' market. There is little to disturb the stability of the system as long as one is more or less like the others. With the pressures for change in the late 20th century, upgrading facilities was the main thrust. Air conditioned buses and classrooms, computers and choice of cuisine through vending machines were the main changes one saw. In addition there was a rush to the shelter of international certifications such as IGCSE, O and A Levels and International Baccalaureate. There simply was not enough reason to disturb the status quo in this niche market.

It is not surprising that the real pressure to change is to be found only where the stakes are highest. In Tamilnadu it is 2 Lakh teachers and 1 crore students in the state school system. The large numbers, when energised by increasing financial allocation, create the climate needed to answer the deeper questions and the existential disquiet is intensified. It is not 50 or 100 children in a class, but 10 Lakhs children in each class the state talks about. No longer can state governments complain and remain frozen. Small increase in percentage of budget, up from about 2% a few years ago to 3.7% this year, has unleashed resources for state education in India. This investment cries out for efficacy and demands results.

For the first time in India we are seeing an inversion of realities that may soon sweep the

nation, if the lessons from Tamilnadu are learnt well and followed up. Till now, the state educational models tried emulating the private school educational practices. We may soon see private schools emulating the state models. Surely this sounds blasphemous!

A silent revolution is sweeping the state of Tamilnadu, a revolution in education. It is based on sound principles and is born out of the same elements that have hampered state education. Large numbers, poor facilities, poverty. The equations have shifted, thanks to the changing politics, thanks to the global movements and, not least, because of the dedication and selflessness of one man, with the right qualities of head and heart, in the right place to tilt the scales.

Mr Vijaykumar, State Project Director, Sarva Shiksha Abhiyan, asked some fundamental questions. **If children after 5 years of schooling are not adept readers, something must be wrong and it has to be set right.** This admission of the system's shortcoming was a requisite beginning to bind the educational community at all levels. The next step was to search, to see if viable models existed elsewhere. SSA were introduced to the effort of the Rishi Valley Education Centre (Krishnamurti Foundation India). The team working for the rural education centre had developed educational material that was called 'school in a box' under the RIVER project. Shri Padmanabha Rao and Smt Rama Rao were the pioneers who generated the concept and the materials.

The Rishi Valley rural school model has some distinct features :

- multi age classrooms immediately creating a continuum rather than sharply delineated age wise classrooms
- pace can be decided by the student as he / she moves towards the materials
- educational material ordered in a manner than can be accessed by the students themselves. ie process of the classroom is transparent to child and easily learnt
- process is child friendly with the teacher needing only class 10 qualification.
- easily replicable with graded material

The SSA studied this model, tested it, modified it to suit the TN schools, and then took it to all its 37000 schools in careful phases.

- SSA selected 26 practicing teachers who were trained by Rishi Valley Rural Education Centre during 2003 and 2004. Four co-ordinators, with I to V and experience, along with the teachers developed the modules.
- The ABL approach, integrating classes I and II, was tried in 13 schools in 10 zones during 2003. The hope was to integrate upto class IV in phases. With encouraging results, this approach was extended to all 264 schools in Chennai Corporation during 2004. During this year, learning cards for classes I & II in 4 subjects, and teachers manual were prepared, printed and distributed. In the year 2005, class III was integrated with class I & II.
- A resource centre was functioning to offer full time support to teachers at Corporation Middle School, Ranganathan Street, Nungambakkam.
- Soon all 37000 primary schools were transformed, integrating classes 1 to 5 in 2007

To Tamil and Mathematics, SSA added the subjects Science, Social studies and English to complete the picture. The structural change of the classrooms, from single age to multi age, was a paradigm shift. Students and teachers functioned from the same physical level. This move united the teachers, students and educational administration with a common articulated purpose, in words that were shared and in processes that were shared as well, a different set of processes from those that existed a decade ago.

The principles were simple - Find a good question, a question that all share silently or vocally, and then start a search to see how others have gone about answering this question. If you find a good answer, try a pilot. If that works, contextualize it, modify it carefully, and then scale it up. And big lessons were learnt - A huge system can change and move if people share a question and a concern.

It would have been understandable and acceptable if SSA had rested on its success and if

Mr Vijaykumar could well have been satisfied with the accomplishment of transforming the education of the youngest students. This was already more than anything accomplished in the 60 years since independence. However, he was not content to rest. He saw more questions -

- Were there similar possibilities for the upper primary, grades 6,7,8 where children could learn through activities?
- Could we not offer rich education to the students in the upper primary as well.
- Was there something to be done in the upper primary and in the exam classes.

With these questions SSA again started exploring, looking at other models and experiences that were being practised in various institutions.

The journey of The school KFI, Chennai

In a strange parallel, in 1999 The School (Krishnamurti Foundation India) in Chennai, reorganized its primary classes, from grade 1 to 4 into a multi age format. The inspiration for this movement came from the following perceptions and questions:

- Do children really learn better in same age classrooms? How has this been arrived at? Did not earlier schools across the globe function in the multi age environment?
- Would comparison be reduced if students were to be in multi age class rooms?
- Not being in the same social group all the years would children not find greater social space for being and learning?
- Would opportunities for learning from each other and for reiteration not improve?
- Could we not learn from the experiences such as the Rishi Valley rural schools, Vikasana in Bangalore, Neelbag and the Montessori schools?

Classes 1,2,3 and 4 were replaced with 4 mixed age environments called jamun, mango, peepul and neem

In the middle school, there were questions and suggestions on how to address the persistent patterns teachers witnessed. After much effort in the early years, students gain familiarity with reading and writing. Just when students can begin putting these capacities to use they lose interest as they are overwhelmed - the world of media, exposure to the exciting world of things and glitter, and the world of peers begins to pull them away from autonomy, independence and building of esteem. This process seems to affect boys more than girls.

Different approaches were tried to change the landscape. To create opportunities for teachers to know each student, one teacher taught Science and Maths and another taught English and Social studies. This made a difference, though small. However, *to facilitate greater freedom for the students, to engage with the written word, to gain confidence through reading, writing and understanding was elusive.*

The Krishnamurti school in Bangalore had tried the Mixed age environment in the middle school. The School in Chennai embarked on this journey of finding out if, through good design of the educational environment, a greater sense of purpose and energy could be obtained from the student. A key perception was that **each** student needed to be 'active' and **not** 'passive' during the transaction of academics. Another was that participation in '**constructing**' knowledge' was better than students largely being recipients. A pilot programme ran for the academic year 2006-07 with 29 volunteer parents and students. And the school decided in January 2007 to proceed in this direction for the whole middle school.

The educational endeavours of the state and that of one small school grew a connection. Mr Vijaykumar, having heard of some of the attempts, visited The School in the end of March 2007. He sat in the circle of children during 'circle time' and observed the proceedings carefully for a full hour. He and several of his colleagues held conversations with the teachers and the Principal regarding what ideas could be taken forward, replicated. He left saying that he wanted things like the ABL replicable material for the upper primary classes. The school felt it had something valuable to share and SSA was eager to find something meaningful. But this interaction did not yield very much in terms of concrete ideas.

The School had begun, under its newly established Outreach programme in 2006, to consciously reach out and share, collaborate and extend itself. Some workshops were planned for teachers from many schools under the umbrella of Life Skills Education in collaboration with another agency. At this time the Coordinator of the Outreach programme, Smt Sumitra M Gautama, met Mr Vijaykumar with a request to send teachers. During this meeting, Mr Vijaykumar asked if The School could do a series of workshops for SSA trainers to communicate new approaches to learning. She readily agreed and, in consultation with colleagues, decided to focus on ACTIVE LEARNING METHODOLOGIES (ALM) as an approach in middle school processes.

Under this umbrella, The School teachers shared with SSA trainers, in 11 days of workshops what they had learnt, practiced and what they considered important. The process of the workshops were largely self reinforcing. Using the insight, that 'one learns to play the cello only by playing the cello', the trainers were exposed to the educational principles of ALM through the processes being suggested. The content was different but the modality was as if they were students of middle school who had to transact material from text books.

The ALM approach fundamentally involved some simple and obvious steps -

- students individually reading a passage or a lesson,
- individually underlining words not understood, referring to the dictionary,
- students individually writing down their questions based on what they have read
- representing their individual understanding as a visual map of connected ideas
- small group discussion to listen to different views and for summarizing and then
- large group communication.
- Specific approaches such as SQ4R, SQ3R and PQRSST were introduced along with summarizing techniques.

As 60 Block Resource Trainers were ready to give it a shot, Mr Vijaykumar and his colleagues decided that the ALM approach could be piloted in 120 schools in 12 districts of Tamilnadu. The responses would show if the process was communicable, and if the students and teachers could accept it. This phase of the work started in June and soon, by mid July the voices from students and teachers in the 120 schools provided enough reasons for optimism. The responses were positive and completely supported the confidence expressed by the 60 Block resource trainers. While this was a source of happiness for all, there was much work to be done. How was the text book to be used? How would teachers be trained?

A MOU was entered into with The School to gather support for the work regarding ALM to move ahead. Trainers from SSA started visiting The School and working hard to generate the **framework of lesson plans** to enable active learning to happen in the classes. To support SSA trainers in taking the next step, guidance was provided by a team teachers from The School. All subjects, English, Sciences, Social studies were taken up in the first phases. Maths was reserved for the year 2008-09. The trainers, numbering up to 15 on any given day would work in The School and the teachers of the school would provide guidance to them. This enormous effort from the trainers, more than 2000 man days of effort, honing the lesson plans for transference to teachers, was a major thrust of the academic year 2007-08.

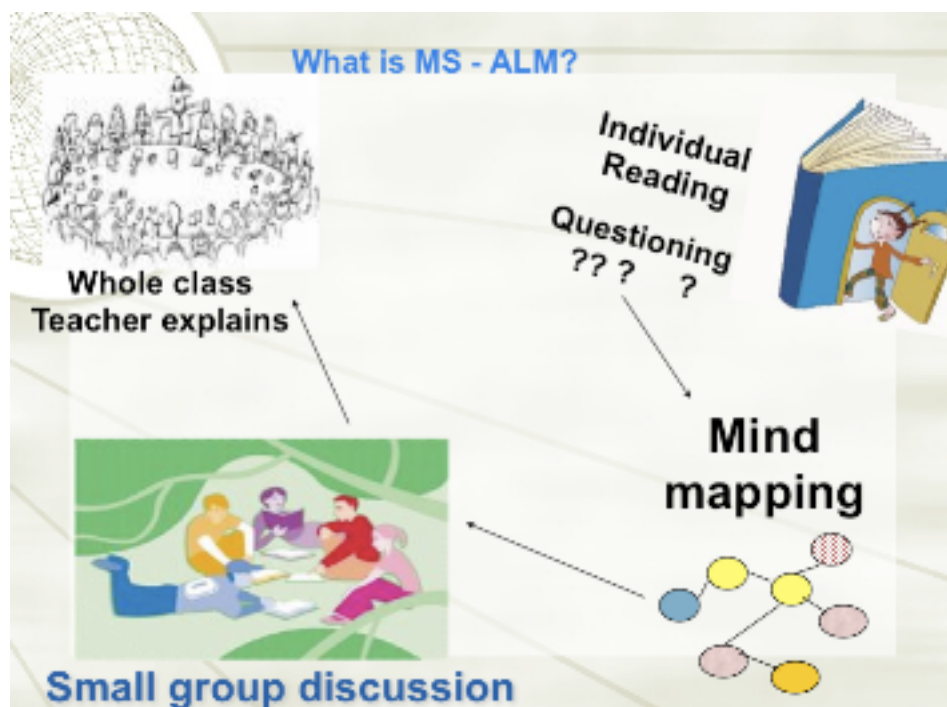
At the school this whole venture was seen as a special effort and the support to SSA was in the cracks in the timetable of a fully running school. Practising teachers took on the additional work in the free slots. At times individuals were stretched. Much credit goes to the teachers for the work in consonance, the shared vision and the support for SSA trainers. In sharing with SSA trainers the teachers have grown. It is important to mention here that none of the teachers or the school accepted any remuneration from SSA for the time and effort. The effort was seen as an offering for the common good. A very special role was played by Smt Sumitra M Gautama in binding this whole effort together at all levels, overseeing the coherence and understanding the needs of the hour. None could have expected this work to spread so far, so quickly.

The concerted work yielded good results. Any visitor to any of the middle schools in the state would see the shift and the energy. The emphasis subtly and definitely had shifted to learning, rather than teaching. The students rapidly displayed confidence as they mastered the

elements of apprehending knowledge through questioning, mind mapping and the essential process of social contact with peers and teachers. The blossoming grew from strength to strength and soon a Government order was issued making ALM a major thrust.

Ulaganathan, a resident of the village Kilapakkam, about 11 km from Thirukazhukundram, is a student of class 8 in the village school. Born to Dalit parents, he works in the fields, tends cattle and supports his family in many ways. In June 2008 he visited Chennai and was asked to do some reading. He picked up a book and started reading a chapter in English, in a confident voice. After his reading, he asked for the meaning of the words he did not understand. Next he proceeded purposefully to put the information and details in a mind map. One saw an empowered learner.

Since the principles, behind the processes suggested to SSA by The School, were constructivist, the student participating in the process of generating knowledge and understanding, questioning has begun in right earnest. Can rote learning, still heavily practised in the exam classes be ended? At the time of this writing, May 2008, the chips have been moved from positions they occupied for more than a century.



It important to mention, the success of this effort also lay in two very crucial adaptations:

- no new text books were asked for.
- the classroom structure was left intact, ie. the classes were not mad multiage calssrooms.

The processes by which they would be transacted were the area of attention. fundamentally involved some simple and obvious steps -

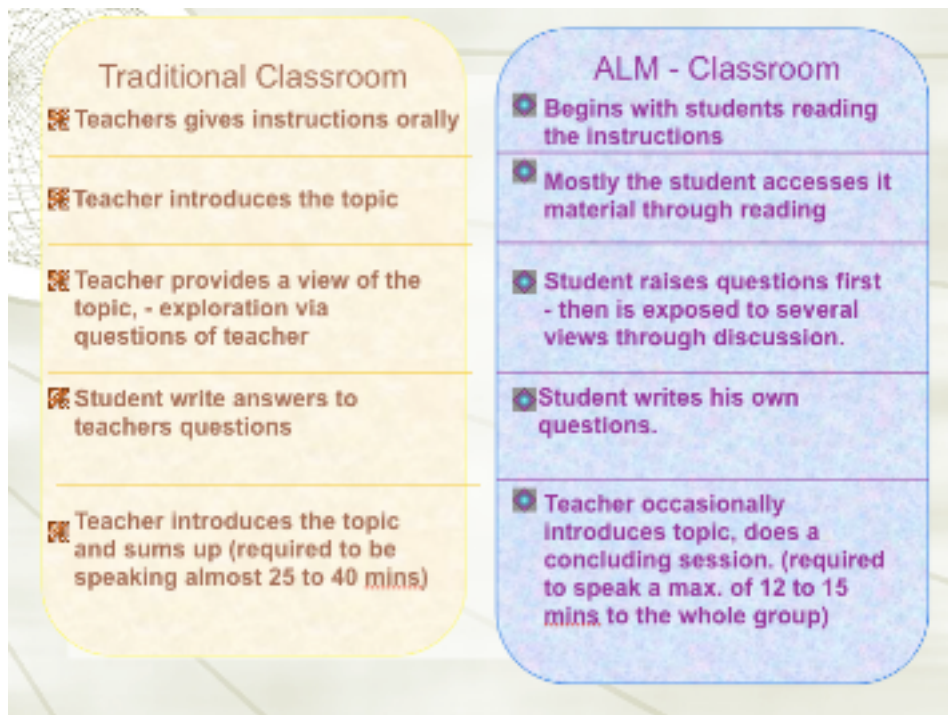
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The present move rides on the strong move for social justice in which schools have an important role. After the noon meal schemes, now Govt schools may be getting ready to say that 'every child has a right to actively participate in knowledge creation and construction'. The winds

of change have blown away many myths:

- the underprivileged need education that is different from the privileged
- good education can only happen with heavy infrastructure and excellent facilities.
- Government schools and private schools have little in common

The sharing of the ALM processes proved, with refreshing simplicity, that what works among children in private schools can work equally well in Govt schools. The horizontal transfer of the processes also gives great energy to the reverse possibilities - of private school learning from the movements in Govt schools. Nothing could be more precious in our times! when divisions are gaining prominence, to discover the truth that all of us are human and similar, and the same processes work well with all of us. And probably nothing holds promise of the level playing field, than the simple processes in education, held consistently, humanely, focussed on unleashing the learner.



For The School the journey of discovering meaningful educational parameters has taken us further than it was ever expected. Nothing could have prepared us for the extraordinary responses from trainers, teachers and students. Nothing is as rewarding as seeing an Ulaganthan, or thousands like him in remote corners of the state, using processes that the school uses with its children.

In conclusion some extracts from a Joint Review Mission

The work of SARVA SHIKSHA ABHIYAN commenced in 2001-02 in Tamilnadu and was reviewed by the Seventh Joint Review Mission during the period Jan 21 – Feb 5, 2008. The report submitted by Professor C. S. Nagaraju (GoI) and Dr Michael Ward (DFID). The following paragraphs tell a tale of rapid and almost incredible change.

1. *The Mission got a strong sense that the State is on the move with regard to quality improvement and the introduction of ABL in all the primary schools and the Active Learning Methodology (ALM) in all the upper primary schools has clearly stimulated and excited officials, teachers, students and parents in an unprecedented way. The teaching and learning process in all of the State's 37,486 elementary schools has been transformed through the introduction of ABL and ALM and the Mission was greatly impressed with the way the intervention is being carried out and the speed with which change is taking place.*
2. *In response to concerns about learning levels, the State has taken up in a systematic way two major quality improving initiatives involving comprehensive changes in curriculum, assessment, teaching and learning materials, teacher training and professional support,*

school organisation, classroom organisation, pedagogy, teaching and learning processes and education methodology. One of them is ACTIVITY BASED LEARNING (ABL) for the primary stage and the second is ACTIVE LEARNING METHODOLOGY (ALM) for the upper primary stage – see the summaries of each of these methodologies at Annexes 3 and 4. These are both well thought out and high quality interventions. While it is still too early to draw conclusions about the likely development of the reforms in the longer term, so great has been the short term impact that the Mission considers ABL and ALM worthy of detailed treatment in this State Report.

- 3. Popularly recognized as ALM by the educational practitioners at upper primary level, the method involves the active engagement of the student in constructing knowledge. The innovation was developed with the help of 'The School' of KFI and involves major changes in the classroom processes emphasizing the importance of the engagement of the learner with the sources of knowledge and not as a recipient of information from the teacher. In order to ensure its acceptability in the ongoing system of education at the upper primary stage, the changes in classroom processes have been anchored to the existing textbooks while allowing the teacher to guide students in critiquing the knowledge contained in the 'text'. One of the important transactional tools introduced in the classroom through this process is termed as mind mapping. This device expects students to analyze and map the components of units of text from the textbook during the lesson in the form of a conceptual map. The process provides each lesson with a clear structure: firstly, the teacher introduces the lesson and then guides the students in their reading and processing of the information provided in the selected text in terms of its thematic structure; secondly, the structures generated by each student, the mind maps, are shared and discussed in the class - in this process a consensus on the concepts contained in the text develops, the students formulate questions to facilitate reinforcement of their understanding of the concepts and this leads, in the third and final stage, to a summarization of the knowledge learnt and an evaluation of the students' understanding.*

When one reads this chronology of events one cannot but marvel at the remarkable movement in Tamilnadu Government school education. The structure has been transformed and the bar has been raised. How many children in private education actually have an active school day? How many schools have discovered the special chemistry needed to have a class without heavy authority and fear? And how many children get to participate actively in the creation of knowledge and understanding in the classroom?

Yes, there has been a revolution, a silent revolution. Like all revolutions it has upturned the status quo and upended many assumptions of the older order. In 2008 June one may say that Government Primary schools are better than most private schools in the state, an enormous achievement in 6 short years. **Child friendly multi - age classrooms are to be found in all 37000 primary schools. Similarly, in 10000 Govt Upper primary schools that students have Active learning possibility.**

Few private schools can offer such an education to the young, though they have much better facilities. Is it time for private education to emulate state sponsored education? Will private schools deliver education that, at least, matches what is available in Government schools?

The credit for this remarkable transformation must surely go to the officials and trainers of SSA, the teachers who embarked valiantly on this exciting journey, and the vision and leadership of Mr M.P.Vijaykumar, supported by the State Education ministry officials and those from the State Education Departments,. It is the rare privilege of two Krishnamurti Education centres to have been part of this movement and to witness their efforts carried so far, for the less privileged of this state.

10000 schools across the state underwent a dramatic, refreshing process in 1 year with teachers, trainers and students encountering easily learnable processes. It is probably the most rapid transformation of schools ever attempted in one year anywhere in the world. Change on this scale is rarely possible without a great sense of participation and ownership from the constituents involved. Interacting and observing the SSA staff at work during their visits to The School, one saw enthusiasm and effort of high order from a large number of people. What made

this possible?

Here was a body that believed that their efforts were 'worthwhile' that 'change is possible', a body that had not given up hope. From where did this emanate? The slow, careful trajectory of the ABL movement in 37000 schools in the Primary classes, over a period of 5 years, and its remarkable visible success, had communicated, that CHANGE WAS POSSIBLE. It is to the immense credit of the leadership that, rather than rest on laurels, they persisted and continued to enquire and search, with the belief that, with the people we have, relevant changes can happen. One may conjecture that the consistent, direct, respectful, approachable-to-all style of leadership, drew tremendous gratifying, reinforcing echoes from all the staff.

The big lesson is that large changes are possible, changes that benefit the larger system. The lesson of SSA TN may be yet bigger - selfless leadership, focussed on public good, draws people together. If the leadership is direct, approachable, respectful and consistent great effectiveness is possible. It is important and vital that this style of leadership be imprinted in the processes within SSA TN. It is hoped that the other states such as, Chattisgarh and Pondicherry, that wish to take forward the learning from Tamilnadu would note this aspect and look beyond the numbers, and reflect also on a working culture that makes such movement possible.

The response to this movement is now not confined to the state of Tamilnadu. In Chattisgarh the Education Secretary Shri Nand Kumar is particular that ABL is extended to 8,000 schools this year and all the 40,000 schools by 2009. Surely, if a viable, effective educational alternatives have been crafted in one state, so can it be in others. Quality school education in the world's largest democracy is surely an achievable dream today.

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