

Activity Based Learning (ABL) in Tamil Nadu

Paper presented to the International Conference on Teacher Development and Management, Udaipur from 23rd to 25th February 2009

**By
M.P.Vijaya Kumar and Michael Ward**

Introduction

With the support of Sarva Shiksha Abhiyan (SSA) Tamil Nadu has ensured that practically all the 6-14 year old children in the State, including those from the poorest and most disadvantaged households, are enrolled, regularly attending and completing elementary education, but, until quite recently, this achievement had not guaranteed quality. The assessment of student learning achievement carried out jointly by SSA and the State's Director of Elementary Education in 2006 showed that a large proportion of the Class V students included in the survey were not demonstrating basic learning levels in Tamil, Maths and English. These surveys indicated that even after five years of schooling children in the State have failed to secure skills in language and Maths. Mastering basic academic skills in the early years of schooling is the foundation on which learners can build higher levels of knowledge and understanding and secure emotional and social development.

Children begin to acquire language from the ages of 1 ½ to 2 years and become fluent speakers in their mother tongue at the age of 5 or 6. Children have an inherent capacity to learn and we can see that they learn many things outside the classroom, particularly from their peers and older siblings. When they can learn so many things outside the classroom without the assistance of a teacher, why should children fail to learn in a classroom situation? The Government of Tamil Nadu concluded that it was because the prevailing teacher-centred pedagogy and the classroom atmosphere itself presented barriers to children learning. As John Holt had observed more than 45 years ago:

- If the situations, the materials, the problems before a child do not interest him, his attention will slip off to what does interest him, and no amount of exhortation or threats will bring it back.

John Holt: How Children Fail, 1964: page 265

The State's teachers, although all had been trained to teach, had seemingly not learned the art of teaching. It was not just one or two teachers who were failing in the classroom but the entire teaching community in the State, 120,000 teachers were unsuccessful. For the managers of the education system in Tamil Nadu it indicated that the prevailing dispensation had failed to prepare the State's teachers to be effective and, most disconcertingly, there had been a system failure. The overall conclusion was that there was some thing basically wrong in the State's teacher training programmes, both pre

service and in service and what was needed was nothing short of pedagogic and curriculum renewal.

The State therefore took up in a systematic way under SSA a major quality improving initiative for primary education called Activity Based Learning, or ABL for short. ABL involves comprehensive changes in curriculum, learning assessment, teaching and learning materials, teacher training and professional support, school organisation, classroom organisation, pedagogy, teaching and learning processes and education methodology. ABL is an extremely well thought out and high quality intervention that is attracting considerable attention. At the heart of the reform is the view that the problem of low student learning achievement could best be tackled through a curriculum and pedagogic renewal to transform classroom transactions. The aims of the reform harked back to earlier efforts at re-newing the education enterprise:

- we should make schoolrooms and schoolwork as interesting and exciting as possible, not just so that school will be a pleasant place, but so that children in school will act intelligently and get into *the habit* of acting intelligently.

John Holt: How Children Fail, 1964: page 265

What is ABL?

Activity based learning has long been held up in India and across the world as an effective pedagogical method, particularly for the early years of schooling, when the child begins her adventure of learning in a formal environment. As early as 1912 Maria Montessori was extolling the virtues of activity based learning and experimentation by students in the classroom. However, in the Indian experience, activity based learning has been successfully tried out only in small, alternate schools, born of the dream of visionary educationists, such as the Rishi Valley Schools in Andhra Pradesh (this is an NGO that has been pioneering child-centred activity based learning in India for several decades).

ABL in Tamil Nadu has been developed out of the Rishi Valley experience and adapted specially for Tamil Nadu's schools by the State Department of Education with the support of SSA. In line with the reality of the multi-grade situation that exists in the majority of Tamil Nadu's schools, ABL emphasizes a teaching and learning process that both individualizes and democratizes classroom transactions. This child-centred, learner-guided approach is facilitated through specially designed learning cards and other materials, including Montessori Mathematics equipment, that reflect the content of and the competencies aimed at in the prescribed textbooks – this is a major development in education in the State. The curriculum is arranged in the form of learning ladders with clearly defined and sequentially organised learning milestones and units of work comprising tasks that have to be completed in order to progress upwards through the first four standards – the learning ladders for each subject and standard are displayed in each classroom and the learners are guided by this tool towards the appropriate learning materials.

Each learning card in the system is coded with easy to follow symbols and reflects a stage in the clearly marked developmental path of learning. The achievement of the learning milestones on each chart by each individual student is monitored by both the learner and the teacher through an easy to follow Achievement Chart that is displayed in the classroom.

In summary, the three key aspects of ABL are, firstly, the specially designed materials that facilitate self-guided learning; secondly, the child-centred teaching and learning methodology; and, thirdly, the classroom organization and management that facilitates group working. Combining these three aspects effectively in the classroom is the challenge for teachers and teacher training.

What has been the impact of ABL?

The impact of ABL on the schools and classrooms has been extremely positive. The classrooms have been completely re-organised and teachers and students are now spending significantly more time on task. The quality of time on task has also improved and the latest assessments of student learning in Standard III recently carried out by the National Council for Educational Research and Training (NCERT) reveal significant gains in learning achievement in Tamil and Maths. Success is breeding success; teachers enjoy working with the new methodology, the children enjoy the freedom to work at their own pace and the interactions with attractive learning materials and their peers. The multi-grade situation (where children of different grades are mixed together in the same class), which affects 80% of Tamil Nadu's schools, has been transformed from a problem into an opportunity to maximise peer supported learning. The mixing of the age groups in each class promotes flexibility in the system and spreads the burden of coping with Standard 1 students across all the teachers in the school. The ABL system allows children to learn at their own pace, cutting across grades. This is also beneficial for students with siblings in the same school as the ABL system facilitates the placement of new Standard 1 students in the classes of their elder brothers and sisters.

Tamil Nadu's and SSA's achievement

The up-scaling of ABL to cover 7 million children studying in more than 37,000 schools in an entire State in one massive sweep, is a remarkable achievement. The system of progressive and effective education that has, to date, been confined to a few elite private schools in the country, is now made available to all the children of Tamil Nadu, particularly those from the lower economic strata of the community. In implementing ABL at such a scale and in such a short space of time, the Government of Tamil Nadu is to be congratulated for its achievements. ABL will continue to be enriched and improved in support of ever higher levels of learning for the State's children. The key factors in the successful introduction of ABL have been, firstly, the extremely well structured pedagogy and, secondly, the effective teacher training and support for teachers in schools. In the remainder of this paper we describe how teacher training for ABL has been implemented.

Teacher Training

Education reform is basically about changing what teachers do in the classroom, it is as simple and as complex as that. At the heart of ABL was the aim of transforming the State's teaching and learning process from one which was teacher-centred to one that is child-centred.

Traditionally teaching and learning processes in the State's schools have been dominated and led by the teacher and her interactions with the students in a whole class situation with the children seated in regimented rows and the main methodology being one based on lectures and rote learning. The teacher would lead students as one body from lesson to lesson with no allowances being made for slow learners or students who take time off due to illness or are absent for other reasons for an extended period. The teacher would spend considerable amount of her time and energy on maintaining discipline and keeping order and would waste her breath in loud and continuous discourse, lecturing the students from the beginning to the end of each school day. The main features of the teacher-centred classroom have been recently described by NCERT in its Source Books on Assessment for Classes I-V and are as follows:

- Teacher gives instructions and expects children to obey and be disciplined;
- Children listen while the teacher teaches;
- Teacher reads the textbook or writes questions and answers on the blackboard and learner copies these. At times one child reads the textbook aloud while others listen;
- Learners memorise facts given in the textbook or as told by the teacher;
- Teacher controls what happens in the classroom, children's participation is minimal;
- All children generally learn individually;
- Timetable is fixed;
- Seating arrangements are fixed, usually regimented rows and columns;
- Materials are only for display, not use by the students;
- Children look bored and disinterested;
- Assessment is undertaken as a separate activity;
- Children are assessed through tests and exams;
- Report cards are used to convey the learners' achievement;
- Children's performance is reported in terms of marks for subject areas.

Source Book on Assessment for Classes I-V, NCERT: 2008:page 5

In ABL, the focus of the teaching and learning process is the learner and her interactions with materials, the teacher and other learners. Under ABL the teacher sits with the children acting as a facilitator of learning rather than the single font of all knowledge. The challenge for teacher training was therefore enormous as it entailed changing the system from teacher-centred to child-centred, the main features of which under ABL are as follows:

- Teacher provides learning opportunities and guides a range of meaningful learning.
- Teacher provides learning situations that give children an opportunity to observe, explore, question, experience and develop their own understanding of various concepts.
- All children participate actively in different activities/tasks.
- All children construct knowledge on their own, based on their experiences inside and outside the school.
- All children work both individually and also in groups, discussing, sharing, co-operating and respecting others' viewpoints.
- Timetable is more flexible, depending to a large extent on the stages children have reached in their learning.
- Seating arrangement changes according to the activity being organized.
- A variety of materials, aids and equipment are available and used by children.
- All children are engrossed in what they are doing.
- Assessment is self-assessment by the learners as part of the teaching learning process.
- All children are assessed informally by teachers while doing activities/tasks, primarily through the teachers monitoring of progress on the learning ladders – the children are not aware of this assessment.
- A report conveys the learning and progress of the child.
- Children's progress on the learning ladders are reported in qualitative terms and on all aspects of development – some children move faster than others and all types of learners are accommodated in the teaching and learning process.

The focus of the in-service teacher training under ABL these past four years has therefore been to transform the situation in Tamil Nadu's elementary school classrooms from teacher-centred to learner-centred. The key to ABL's success has been the way in which teachers have been transformed from lecturers to directors of child-centred learning. How has such a significant transformation been effected in over 37,000 schools in such a short space of time? The answer lies in a further transformation – the transformation of in-service training and academic support to schools.

In service teacher training prior to ABL

Prior to the introduction of ABL, in service training was mostly held as a ritual. It was never need based and the focus of ensuring children's learning was missing. The training used to be conducted by trainers largely to fulfil system requirements and to expend the resources sanctioned for this activity. The standard practice was to identify "hard spots" (areas of the curriculum thought to be causing problems for teachers and students) and train in these areas. The training sessions were mostly lecture based and had very little scope for practice in the training sessions. Even if in certain cases training sessions were practice oriented, there was very little scope for teachers to implement what they had learned in the classroom. The rigidity of the classroom structure and form never allowed the teacher to try any thing new. The pedagogy was unbending and inflexible as the

coverage of syllabus by the teacher was the single most important objective and every thing else was considered superfluous.

ABL and teacher training

Teacher training during the implementation phase of ABL did not go the traditional way. The classroom methodology in 37,486 schools underwent a major shift and there has been an overwhelming and positive response from nearly 120,000 teachers. All the major changes brought about by ABL happened within a span of six months during 2007. The training sessions invariably had full attendance and teachers' attitudes were positive throughout. What was so special about it?

Clarity on pedagogy –the focus for Teacher Training

The first thing that is special is that the teacher training in ABL has a clear focus and a simple objective to achieve. An excellent working model of child centered pedagogy was developed and field tested successfully. The working model has sound theoretical underpinnings. Model schools where ABL was practiced to a high standard were established in Chennai and in each block and these demonstrated the theoretical principles and teachers were brought to these schools to observe the pedagogy and practice – seeing is believing and in almost all cases the teachers were convinced of the excellence of the methodology and were re-assured about what it would mean for them in terms of workloads and tasks. The system was completely transparent and open, any body visiting the model schools could feel the strength of the system. Just by observing the classroom and by interacting with teachers and students, the vigor of the sound pedagogy and the quality of the materials could be easily discerned. Keeping these model schools always in view, the teacher training had a clear and unambiguous objective to achieve, a benchmark of excellence that teachers could envisage and strive for. With something productive to achieve, especially seeing children learn, and something concrete and achievable within their grasp, most of the teachers started seeing purpose in their profession once again. What can motivate teachers more than helping children to learn, seeing successful readers emerge from under their care, seeing purpose in their role particularly in molding the future of the State's children? The State's teachers did not want to fail themselves or their students and ABL gave them the means to transform the classroom situation and to change the way they went about their profession.

Hands on

The second special attribute of teacher training under ABL is that it is always hands on with a minimum of theory. Invariably not less than 80 % of training time is spent in practice and only 20 % is allotted for theory. The intention was to demonstrate to trainees practically how the ABL theory gets translated in to action in the classroom. The practical sessions were always in the regular model schools where the ABL pedagogy was in practice. Therefore the trainees had a chance to see things happening and were free to clarify any issue from the teacher or the child – it was most pleasing to see how

teachers readily accepted guidance from the children in the ABL methodology, thus changing teachers' attitudes to learning and children.

Master trainers – practicing teachers

The third feature of teacher training under ABL that makes it special is that the teacher trainers were themselves primary school teachers; it has long been acknowledged that teachers with experience of teaching at the primary level will be in a better position to appreciate sound child centered pedagogy and the deficiency in the existing system. Therefore the master trainers were invariably practicing teachers with sound theoretical knowledge and practical experience. The acceptance levels of the trainee teachers tended to be much higher since the training input was delivered to them by their experienced colleagues. In many cases the teachers that trained together stayed in contact with each other through mobile telephone conversations and supported each other as they implemented ABL.

On site support

The Teacher educators under ABL (the Block Resource Teacher Educators, or BRTEs for short) are also responsible for on-site support to 6-8 schools in a cluster and follow-up the training systematically to facilitate the achievement of the desired practice in every classroom. The BRTEs utilize a set of 18 process indicators to assess the extent to which each school and teacher is implementing ABL. The schools are graded, not according to student learning levels or facilities, but according to how well they are implementing ABL. Those schools and teachers that are the slowest in implementing ABL receive the maximum on-site support. The strengthening of accountability is another implication of having the trainer as supervisor. The trainer has a responsibility to ensure all that she delivered during the training is reflected in the class room.

Training is a process and is not just an ad hoc activity. Whatever they learn in the training session, many doubts may arise when the teachers attempt to practice in the classroom. Effective on site support is therefore given by practicing teachers. On site support was always a part of each training programme. The opportunity to guide and provide on site support, being a critical strategy, developed confidence in the minds of teachers and sent signals about the seriousness with which the management is concerned about the business.

The managers of the education system ensured that teachers were never isolated for training from their fellow teachers. The ABL training covered all the teachers simultaneously, especially the head teacher in the school. Head teachers were critical to the success of ABL, as without the support of this key person things can not change or improve in the schools.

The BRTEs believe in ABL and are able to demonstrate the pedagogy to a high level. ABL was not a casual and superficial training event happening or not happening distantly else where, but a holistic and comprehensive reform of the teaching and learning process

that affected all aspects of the school experience. These changes were real, happening right in front of the teachers' and students' eyes and included the physical transformation of classrooms, a radical re-orientation of how classrooms were used, a completely new set of curriculum materials including workcards, games, maths equipment, audio-visual aids, posters, assessment charts, etc.. The strong belief and enthusiasm of the BRTes quickly communicated itself to the teachers and the children and the power of the methodology resulted in early successes for students and teachers alike and success breeds success.

Managerial Direction

The Project management team including Political executives spoke in one voice sending signals down the line on the commitment and seriousness of the whole experience. Every member in the managerial and supervisory team, with most sensitivity facilitated the process with the highest level of coordination. There was no departmental barriers and neither was there any place for personal issues or egos impeding the process. The administrative wing and the academic wing of the education system pulled together with one objective in mind: to transform the classrooms, every classroom, through the introduction of ABL.

The project managers were accessible to all the members in the organization. They can be approached any time for resolution of any issue. In fact feed back from field functionaries over the 'phone was encouraged by the project management team. During the period of training the management team was always in the field covering as many training events and schools as possible articulating and interacting with trainees about their training experiences and impressions. The training programme was a package covering all the ABL issues mentioned above. It had a clear purpose and was well delivered. Most importantly, ABL was the only training that the teachers received during the whole year – they were not distracted by any other initiatives.

Pre service

The introduction of ABL has significant implications for pre-service teacher education in the State. Pre-service teacher training has been designed to give sound theoretical knowledge and skills for trainees to apply in real settings in schools. The focus has been predominantly to prepare the trainees for examination and the institutes succeed in this effort. The trainees are given various inputs on theory with very little exposure to practice, even the practical training which they were supposed to have during their period, is mostly in schools that never practice the theory they have learnt in the colleges. In short these trainees never learn the art of teaching in their training institutes. All that happens in the training institute is mostly rote learning, similar to the kind of teaching and learning processes that dominated primary schools prior to the introduction of ABL. There has been a wide gap between theory and practice. When the newly trained teachers take up the job, they depend mostly on text books as they were completely ignorant of practicing child centric pedagogy. Whatever little they had learnt in college could not be practiced in the class room for a variety of reasons. Class room structure and form has

never been conducive for them to practice a child-centered pedagogy. Coverage of syllabus by the teacher has been the focus and ensuring all children acquire all the skills has never been their concern. The supervisory mechanism also was happy with coverage of syllabus as evidenced by notes of lessons written by teachers. The system was so insensitive that it never bothered to review as to why there should be such a wide gap between theory and practice and what should be done to resolve this paradox. With the introduction of ABL these questions can be ignored no longer.

Conclusion

Effective teacher training and on-site support to teachers has been critical to the success of ABL in Tamil Nadu. The State has been able to transform the teaching and learning process in its classrooms through a renewal of materials and pedagogy and the adoption of a new model of in-service teacher training and support. This new model of teacher training has at its centre the use of demonstration model schools where the untrained teachers are able to experience the changed practice at first-hand; they can see the practice, talk to the practicing teachers and students and touch and use the materials in a real classroom setting as opposed to being trained in theory in a lecture hall. The on-site training in model schools is then followed up with months and months of on-site support in the teachers' own schools to ensure that the changed practice is secured, both for teachers and children. When it is clearly evident that the in-service teacher training given in India to date has been far from satisfactory and has not produced any impact in terms of sustained and changed classroom practice and the achievement of higher levels of learning by students, the Tamil Nadu experience with ABL offers an obvious alternative. Rhetoric, platitudes, lectures, instructions, guidelines and workshops for teachers have not and will not produce results in the class room. In-service training has become another ritual. We need action on the ground, solid and productive support for teachers in their workplaces, clear demonstrations of what quality education looks like for teachers to experience and replicate in their own classrooms.

References

Montessori M. (1912): *The Montessori Method*. Barnes and Noble, New York.

Source Book on Assessment for Classes I-V, NCERT: 2008

John Holt: *How Children Fail*, 1964