'NALI-KALI':
Innovations in Primary Education in Karnataka

1. Sector
   Education

2. Sub-sector
   Primary Education

3. Program/project
   Innovations in Primary Education `NALI-KALI', Karnataka

Based on an interaction with the Rishi Valley school, the teachers in primary schools in Mysore worked on the processes of teaching to transform the rigid system in government schools to an enjoyable, participative system focusing on the `Joys of Learning'.

**Key words** – Primary education, joyful learning, innovation in teaching, Mysore, DPEP, Rishi valley school, Learning ladder, nali kali

4. Executive Summary

The Nali Kali approach to learning began in 1995 with Unicef assistance when a group of 15 teachers and administrators from Heggade Devana Kote (HD Kote), a remote tribal block of Mysore district, visited the rural schools run by the Rishi Valley Education Centre in Madanapalli, Andhra Pradesh.

After the visit, Mahadevaiah, a school teacher from HD Kote said–

`We saw that those children were working entirely on their own. Our children were not so active in the classroom. Maybe, because we were not teaching through activities. When we saw how actively children were participating, we realized how hard teachers must’ve worked with them. We thought if we use the same methods, we might be able to bring our children up to the same level’.

"We returned from Rishi Valley after observing what the teachers and children are doing in the classroom. What kind of learning material are they using? How are they using these learning materials? How do they conduct group activities? How does the teacher manage the class? Would we be able to make their method work in our schools?" asked MN Beig, the Education Officer of Mysore district."

Inspired by the principles of pedagogy, which are entirely based on child centered, activity based learning, this group of teachers set into motion the processes for adapting the Rishi Valley pedagogy to their own classroom reality.
The pedagogy evolved gradually over the years, from insights and experiences of the teachers, DIET faculty, administrators and children involved in the programme. Four years since the programme started, Lily Joseph, a school teacher says:

“Previously we were given a syllabus and a textbook. I was teaching that. Children sat and listened like mute dolls. They talked, only if asked. I was doing all the work. It was a one-way process. I talked, they listened. Though it didn’t feel like much work, I didn’t know what methods to use to make them understand. However hard I tried, it was impossible. In this new method, I know the content areas. I have given materials based on this to children. Children learn by doing activities with the material. This process makes them learn on their own, happily. The class atmosphere is not frightening. He doesn’t learn, because of pressure from the teacher. Learning is now a game.”

The Nali Kali team grew from the 15 teachers who initially visited Rishi Valley to 36 cluster resource persons, and thence spread to all 270 schoolteachers in HD Kote block of Mysore district. Since then it has further spread to 1500 schools in Mysore district, and another 2000 schools in selected DPEP and Joint UN systems blocks and clusters outside Mysore district, in all there are 4000 schools in Karnataka where this pedagogy is being practiced.

5. Contributors and references

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6. Project Design- Objectives, outcomes, Methodology

The project objectives were **To encourage a process of interactive learning.** It was based on the realisation that each child learns at her own pace and that the teachers job was to facilitate learning by providing appropriate inputs at each milestone. **Project Outcomes**

1. Development of series of teaching materials – visuals, audio materials, graded texts etc. covering the four main components of primary education

2. Higher levels of motivation of teachers who were involved in this process, leading to better teacher-pupil interaction in the learning process
3. A `joyous' learning model that was taken up in schools in other districts

From HD Kote to all schools in Mysore district in 1998-99, and from there to an additional four DPEP blocks and eight clusters outside Mysore district has been a long journey. The process included (i) visit to HD Kote schools by groups of persons from the expansion blocks, the groups being a mix of teachers, trainers and administrators (ii) further exposure of the same group to Nali Kali through a series of film based training programmes developed by DPEP (iii) more detailed training in the Nali Kali principle, curriculum, learning units, learning ladder and learning material. In this third round of training the group sat down to create/write the cards on their own; creating/writing on their own became an important step in enabling the group to develop a sense of ownership for the material developed. These were done at different stages for class I (April 1999), class II (October 1999) and class III (April 2000).

Training of all teachers in the selected blocks was conducted by the same group, along with 1-2 identified teachers/resource persons from Mysore district for support and handholding. Conducting teacher training on their own helped in a big way to develop confidence among the groups. It also helped break down hierarchies between teacher and trainer, between teacher and inspector/block education officer, between trainer and inspector/block education officer.

In a series of experience sharing workshops that followed the introduction of class I material, a demand arose from the groups in the expansion blocks to adapt the Nali Kali material to their own local situations. This process of revision/adaptation is currently going on. This, in fact, is the spirit of Nali Kali to constantly adapt and revise the material to suit the local needs and meet the newer challenges. For as Lily Joseph says: ‘Education is not like stagnant water. It can only be true education, if there is possibility for change’.

7. Key Processes and Activities taken up

**Educational Material Development** The Rishi Valley Resource persons spent 15 days in HD.Kote. During this they - analysed the `ills' of the education system and identified which of these ills could they address as a team. This lead to identification of Thrust areas.

The team worked for 10 days at the end of which they had developed teaching materials for the first six months of school.

The process transformed the teachers into Educators who `owned' the methods and materials they were to use, generating a high level of motivation among the teachers.

The materials thus developed were tried out in schools, the experiences of its use reviewed again. Based on this, the materials were re-designed and refined. This process of development, trial and revision continued throughout the project.

**What the teachers did?**
Drawing on their own experience of the education system, the teachers and resource persons – made an analysis of the ‘ills’ of the education system that hinder children from fully accessing and participating in the school system and achieving pre-determined levels of learning.

Identified which of these ‘ills’ they could directly address as a team.

Concluded that given the circumstances, there is little they can do to improve the quality of infrastructure, furniture or equipment ‘supplied’ to them. But they can, as a collective, play a more interventionist role in what and how a child learns, thereby draw in more children into the schooling system and enable them to ‘like’ school.

**The Nali-Kali Curriculum**

This analysis and reflection led them to undertake a relook at the curriculum. This lead to:

- A review the curriculum; re-organise the curriculum according to what a child can learn at a particular level,
- Breaking up the curriculum into small manageable learning units,
- Sequencing the learning units into a comprehensive learning ladder,
- Develop activities and a teaching methodology for each learning unit to facilitate readiness for learning, instruction, reinforcement and evaluation,
- Build into the learning ladder an evaluation system which is nonthreatening, continuous and comprehensive,
- Evolve a more democratic, classroom management system, which is not based on the child’s gender, caste, age or ability, but on the nature of activity taken up by the child,
- Develop a system for making the classroom attractive - display of children’s work, children’s blackboard, weather charts, arogya charts, etc.

**Learning units, learning ladder and teaching material**

The curriculum is seen as a continuum from class I-IV - graded into learning tasks along a 4-year continuum. A child who has had to remain absent from school for several days or weeks - be it because of seasonal agricultural work or illness or temporary migration - can re-enter the learning continuum at the level where she left off without having to go through the distress of catching up large chunks of portions missed out.

Nali Kali recognises that all children do not learn at the same pace. Usually a teacher has to handle children at different levels in the same class and also children in different grades at one time. In such a situation the teacher has to divide her time between children of different levels and grades. While the teacher is teaching one grade, children of other grades are left to their own devices. The learning units, learning ladder and learning material in Nali Kali have been designed keeping this ground reality in mind. ‘Here, children of different ages and learning levels, learn together in the same classroom at the same time. In this system a teacher is able to handle about 40 children on her own’ says Kenchamaraiah, Block Education Officer, HD Kote.

Nali Kali teachers decided in the very early stages to dispense with the
prescribed textbooks as they found that when asked to combine the textbook with activity based teaching they restricted themselves only to the textbooks. Teachers felt that textbooks made teaching learning transaction teacher centered. It also made the child dependent on the teacher.

**Developing a classroom management system**

Classroom management has for long been viewed as an administrative problem - most discussions on classroom management have revolved around issues like availability of space, rooms, furniture, equipment and teaching learning material. Classroom management also focuses on maintenance of ‘discipline’ - discipline being construed to mean ‘silence’. (A silent classroom is a hardworking class!). Some discussions on classroom management have also included group formation techniques. But, by and large, even these are seen from the point of view of the teacher - how best the teacher can group children to divide her time, - without giving sufficient thought to making optimum use of the time available to the child for learning activities.

Nali Kali teachers realised that classroom management has to be seen as an administrative, but more importantly as a pedagogy issue. Lily Joseph says:

> ‘We can’t make a child achieve a competency only through activity based teaching. Classroom management is very important. One can understand by looking at the classroom organisation how effective the teaching is, and how the child is learning’.

Lily adds: ‘First of all, whether we teach maths or language, we create five groups. On what basis are these groups created? Firstly, a group that needs total guidance from the teacher; partial guidance from the teacher; guidance from an older child; partial guidance from an older child. Lastly children (who are) working on their own, unassisted. The teacher-assisted group is the beginners’ group. The teacher is constantly with this group. The teacher only gives instructions to the second group. In a peer assisted group a child who is at level 10 will help a child with level 1 work’.

What makes the Nali Kali classroom management system unique is that teachers have classified all the activities in the language and maths learning ladders into the five groups. For example, all language activities, irrespective of the level, using ‘rubber letters’ for the child touch, feel, recognise the letters fall into the fully teacher assisted group. ‘Picture rail’, ‘letter rail’, ‘letter strips’ are activities which fall into the partially teacher assisted group. ‘Picture words’, ‘picture sentences’, ‘match the picture with word’ fall into the fully or partially peer assisted groups. Evaluatory activities such as ‘recapitulation game’, ‘my achievement’ are in the self-learning groups. In addition there is a general group, irrespective of the child’s level, for all songs, stories, shadow puppet plays, craftwork, etc. Thus, the groups are dynamic - their composition changes depending on the activity that the child is doing/playing. All children periodically move back and forth from the fully teacher assisted to the partially teacher
assisted and to the fully/ partially peer assisted groups, depending on their level and activity card. And all children periodically receive individualized attention from the teacher; at the same time have the freedom to do things on their 'own'. This system has emerged from the belief that real and meaningful learning takes place through a dynamic interaction, not only between teacher and child, but also between child and child.

8. Critical Success Factors

**What does it need to succeed**

Small innovative projects are not backed by political will, or administrative conviction and consensus for survival, sustainability and replicability.

1. Nali Kali challenged power relations on so many levels –
2. Grievous omission not to directly acknowledge and address all the uneasiness, resistance and hostility
3. Overcoming resistance and hostility involves creating administrative consensus
4. Getting a few top level administrators on board is not enough
5. Even well intentioned administrators get caught up in looking at it as an issue of administrative management, rather than a social process that involves so many stakeholders,
6. Reports from the ground – not adequately addressed
7. Most important part of making something like this work is to create a plan to gain consensus of all stakeholders
8. Sarkari diktat/ adesh will not work!

**Strengths of Nali-kali**

- Children learn at their own pace
- Each child gets attention from the teacher and/or peers
- Children learn to be self reliant and less dependent on the teacher
- Each child knows her level without feeling compared with others
- Children learn to cooperate, especially at the level where peer help is sought
- Once the teacher has mastered the system, she is in full command of the situation and not harassed about dealing with so many children at individual levels
- The groups are not based on achievement levels and minimize the effects of caste, class and gender
- The learning ladder/ cards methodology is child effort oriented, not teacher-instruction oriented
- Changes in the learning content are possible because of the card system
- Evaluation through games and as part of the daily routine makes testing a painless experience for children

9. Key Processes and Functions addressed

**Making the school attractive** What makes the Nali Kali school attractive is that everything - whether it is the floor or the wall or the verandah or the ceiling
is used as learning and playing space. The floor is used to practice writing and drawing, as is also the children’s blackboard which teachers have created with support of community members. All along the walls there are charts - the learning ladder, the progress chart, the weather chart, the health chart. Special mention must be made of the weather chart. This has been designed for each day of the month with pictures to show whether it is a sunny or a partially sunny day, a cloudy or a partially cloudy day, a rainy or a partially rainy day. Children put a tick mark against the relevant picture everyday, and at the end of the month talk about whether it was a predominantly sunny or cloudy month, as the case may be. All learning cards are also arranged according to the pictorial symbol in a bag and hung on the wall. All the charts and learning cards on the wall are constantly being referred to by children - to check their positions on the learning ladder, to pick out the relevant card from the bag and return it after the activity, to mark their progress on the achievement card, etc. An interesting innovation of the Nali Kali school is the criss-cross of wires at the lintel level. Here the work done by children - particularly in the craft sessions, whether in language or maths or environment studies - is displayed and, most importantly, changed periodically as children create new material.

Many teachers also approached the community to support them clean up/whitewash the school, plant trees - these have, of course, varied from school to school according to the initiative taken by individual teachers and community members.

**In the multigrade classroom** The discussion till now has shown how the system works in a multi-level class. But the classroom reality is multi-level and multi-grade. Does the system work in a multi-grade situation as well? Teachers in Nali Kali addressed the issue of multigrade teaching through the classroom management and the pictorial symbol system.

The system, undoubtedly needs getting used to as Nagaraj, a cluster resource person, reported: ‘In some schools there was a lot of confusion. They hadn’t formed groups. They were sitting helplessly. Then I told them to recall how we had formed groups (during the training programme)...Then they said, ‘Sir, we don’t know how to do it’. I only gave them suggestions. If I had made the groups for them, it wouldn’t have helped, as they have to do it on their own eventually.’

**Vertical rather than horizontal division**

To-date, nowhere in the country are we anywhere close to a one-class oneteacher situation. All schools follow a multigrade system. In traditional schools if there are two teachers for classes I-IV, the normal division of classes between the two teachers would be horizontal, i.e. that one teacher handles classes I & II and the second teacher would handle classes III & IV. Alternatively, one teacher would handle classes I & III and the second teacher would handle classes II & IV. There are several problems in such a division: if one of the two teachers is absent, children in her classes would be left to their own devices - at best the teacher present would give them a reading assignment and ask them to ‘keep quiet/ put your fingers on your lips’. Moreover, in the I & II and III & IV pattern, the teacher handling classes I & II always has an overload, since enrollments in these classes are generally higher than in classes
III & IV. Thus there is an uneven distribution of work among teachers.

Nali Kali teachers have devised an alternate arrangement, namely that both teachers handling classes I-IV be trained in the Nali Kali approach and sets of instruction and learning material be available with each of them. Having done this, teachers have made a vertical (rather than horizontal) division of classes. Thus, if there are say, 30 children in class I, 28 in class II, 24 in class III and 20 in class IV, rather than one teacher handling 30+28 children in classes I & II, and the second teacher handling only 24+20 children in classes III & IV, there is a vertical division. In the vertical division all children in the different classes are equally divided between the two teachers at the rate of 15 in class I, 14 in class II, 12 in class III and 10 in class IV. The advantage of a vertical division is that the workload between the teachers is equally divided. If one teacher is absent due to unavoidable circumstances, children from her class join up in groups with the children in the other class for the day.

How does the system work in a large multigrade class?

Experience has shown that this system works well with a group of approximately 40 children. The overall teacher pupil ratio for Mysore district is 1:34. But there are inter-block and inter-school variations in teacher pupil ratios. Most urban schools and schools in larger villages have adequate, if not surplus teachers. The position in some upper primary schools is however, distressing - with classes IVII some of these have only 3 teachers. In such schools classes I-IV function virtually as single teacher schools. The whole issue of teacher re-deployment is being separately addressed, and significant (but not yet adequate) work has already been done in this area.

As with all other systems, the Nali Kali system also does not work too well in a large class of 50+ children. There is the problem of space and the problem of availability of activity cards to go round. One teacher said 'This method is difficult in a large class of 80-90 children. If there are only 30-40 children they can sit comfortably. We can give them the cards easily. But with so many children, there is too much commotion. It’s like mental torture for us!' Nali Kali teachers are trying to address the issue by creating, wherever necessary two sets of activity cards for children. Block and cluster resource persons try to make the best of a bad situation: ‘When I look at this school, the corridors are large. We can do activities there. Groups doing activities, which don’t require a blackboard can be made to sit outside. I feel they can make use of the beautiful grounds to conduct activities successfully’.

Multigrade teaching will continue for many years to come - this is an accepted fact. But interventions for re-deployment must take place - and very soon before the present sense of confidence and optimism among teachers peters out - to ensure that every teacher has a manageable number of children to handle.

How Nali Kali addresses social reality

HD Kote is a remote tribal block, primarily comprising people belonging to the Jenu Kuruba community. There is a small percentage of people belonging to the agricultural landholding groups - Lingayats and Vokkaligas, and some belonging to the scheduled castes. The tribals depend on forest produce for their livelihood.
Often they as well as the scheduled castes migrate to neighbouring Kerala state in search of work, particularly in the cotton picking season. They also migrate to the coffee plantations of Kodagu and Chikmagalur districts during the coffee plucking season. In addition, there is groundnut harvesting in their own villages.

School calendar and timings, as in all parts of the country are inflexible, since it is uniformly prescribed for the whole state. Children therefore tended to be irregular in school, especially during the peak agricultural season. Even if children did not accompany parents to other places for work, left to their own devices, they preferred not attend school. Against a prescribed 230 day academic calendar, on an average a child attended approximately 110-115 days of school in the year. In many cases attendance was even more irregular.

Attendance of girls tended to be even more erratic as they were entrusted with the responsibility of looking after younger siblings as also domestic chores.

Most children in the area are first generation learners - a learning environment, pressure from parents for their children to attend school did not exist.

Given this social reality, the approach in the Nali Kali project enabled children to participate more regularly and happily, since

- Learning in Nali Kali is seen as a continuum from class I-IV; it is not compartmentalized into class-wise content areas
- The activity cards and the class grouping pattern enables a child to learn at her own pace.
- The system allows the child to re-enter the learning curriculum at the level where she left off without any sense of shame or humiliation.
- Given the fact that children are burdened with household chores as also the fact that children are not likely to get support from parents, the Nali Kali approach does not prescribe any homework. All learning is done in the class.

**Nali Kali addresses problems teachers face in traditional teaching**

As one teacher observed 'teachers equate curriculum only with the textbook. So when we meet to talk about the curriculum, we end up concentrating only on the textbook.' Traditional teaching is dominated by the textbook, and multigrade/multilevel teaching is not possible in a textbook driven syllabus. Moreover the chalk and talk method followed in traditional teaching creates necessarily a nonparticipatory classroom. In Nali Kali teachers felt that textbooks make teaching learning transaction teacher centred. It also made children dependent on the teacher. The fact that textbooks were not used in Nali Kali made child centred learning possible. Teachers also realise that ‘if we were to bundle up all our learning material, it would form a textbook. The reason for splitting up the material into cards is to allow each child to learn at her own pace.’ Moreover, the classroom management system allows for children of different levels, age and abilities to work together in groups and individually.
As already stated in the traditional system, evaluatory procedures provide only very inaccurate inputs for the teacher to remedy her methodology. In Nali Kali a non-threatening, continual and child-by-child evaluation system enables the teacher to ensure that each child has achieved mastery level learning.

The most precious part of Nali Kali is that the system is designed to develop selfconfidence, self-esteem and a sense of security in the child. Firstly, learning is broken up into the smallest possible units and at every level there are a variety of activities for drilling, reinforcement and usage to enable the child to feel ‘I know it. I can do more!’ The environment studies curriculum allows children to learn through exploration and discovery. Secondly, there is no pressure on the child to rote learn huge portions without comprehending the concept. Thirdly, there is the classroom group management system, which does not create discrimination on grounds of gender or caste or age or ability, but provides for all children to intermingle. Fourthly, the evaluation system is built into the learning process and is entirely non-threatening. No child needs to be afraid of failing - she moves to higher levels of learning at her own pace and according to her own achievement ladder. Fifthly, there is an atmosphere in the classroom that is informal, non-hierarchical and friendly.

10. Present Status

It is almost 10 years since the group of teachers from HD Kote first visited the Rishi Valley rural schools. The passage of 10 years raises questions about the sustainability and replicability of the programme.

It is generally assumed that in the Government sector, sustainability should not be a major issue. Nonetheless there were conflicts and resistances - not so much from external sources, as from within the system.

In the first place there was resistance from the cadre of teachers themselves in the expansion areas, a resistance that emanated from their fear of change, fear of abandoning textbooks which are so deeply embedded in the system.

Where is nali kali today

1. HD Kote block 1995-96
   Classes 1-3
2. Other blocks of Mysore district 1997-98
   Classes 1 – 3; except for TN Pura block where introduced in classes 1 - 4
3. 4 DPEP blocks 1998-99
   Classes 1 – 2
4. 2 Janshala blocks 1998-99
   Classes 1 – 2
5. 8 janshala clusters1998-99
   Classes 1 – 2
6. 11 DPEP clusters 1999-2000
   Classes 1 - 2

Evaluation in Nali-kali - Indicators of an effective Nali Kali classroom:
No formal evaluation of learning outcomes has as yet been undertaken for the Nali Kali programme. With the expansion of the programme to all blocks in Mysore as well as some blocks outside Mysore, it became imperative to evolve indicators to assess whether the programme is functioning in its true spirit. The Nali Kali teachers therefore, developed a set of indicators for assessing their own performance. A few of these are listed:

1. Are all activity cards arranged as per the ladder, subject and pictorial symbols?
2. Are children able to identify their learning activity in the pictorial achievement ladder?
3. Are children independently able to pick and replace the activity cards in their respective pouches?
4. Are children able to independently identify and participate in groups according to their learning level?
5. Are all learning activities taking place in groups?
6. Are children able to identify their learning achievement in the progress chart?
7. Have all children acquired learning ability in accordance with the programme of work?
8. Is the teacher participating in group learning?
9. Are children filling in the weather particulars regularly in the weather chart?
10. Are the shadow puppet plays performed in the class?
11. Are children able to sing the songs and narrate the stories?
12. Are children able to demonstrate mime activities?
13. Is the children’s blackboard used?
14. Are the craft activities completed by children displayed in the classroom?
15. Are the micro-survey cards used by children preserved?

11. Change Management strategy and Implementation

**What nalikali challenged**

Classroom management system - being based on a more inclusive organisation of children’s groups

1. Capacity of teachers to design curriculum and create learning material
2. Challenged single caste and gender exclusionary group formations
3. Challenged paternalistic authority of the teacher
4. Challenged authority of administrators and pedagogy pundits, who were used to a system of centralised curriculum and control from the top

**Resistance & conflict- parents**

Replacement of textbooks with learning cards attributed to inability of department to produce and distribute textbooks in efficient and timely way.

**Why no homework?**

**Resistance & conflicts- teachers**

Fear of change – fear at abandoning textbooks
Teachers in expansion areas did not ‘own’ the system as the original group of HD Kote teachers did.

Many teachers not open to rethinking conventional notions of order and discipline

What’s-wrong-with-the-existing-system?’ syndrome; ‘experienced’ teachers – unwilling to explore alternative approaches – fearful of changing the power equations in the classroom

Complaints about repeatedly having to create learning cards by hand

Intermittent rumours/ alarms that the programme would be closed down caused insecurity.

**Resistance & conflict - Cluster functionaries**

Pull of competing loyalties – the needs of the programme against the need to adhere to the centre of power at block and district level.

Block/district functionaries

Not interested enough to fully imbibe Nali Kali spirit and philosophy

Averse to the idea of being trained by primary school teachers

No handholding of teachers who found it hard adapt to the new system

**Resistance & conflict – departmental** Some indifference at higher levels

Used to piecemeal curricular, textbook reform; uncomfortable with process of comprehensive reform covering curriculum, TL material, training, evaluation and classroom management

Success of Nali kali challenged their superiority as ‘pundits’ visits

Under the guise of creating workbooks/ supplementary material to help the programme, initiative wrested away from teachers by experts in Bangalore.

Constant demand for proof of learning achievement – even before system of 4-year curriculum continuum could be put in place

Some doubts – are we making guinea pigs of marginalised rural children?

Lessons learnt -

DPEP could have treated HD Kote as a learning lab till class 4 – evaluated it, and then gone to scale. But well intentioned administrators saw urgency in spreading programme to reach a much larger group of children

In replication, time for processes were not factored in
• ‘Ownership’ necessary for replicability not adequately considered
• Original process spanning 3 – 4 years collapsed into a training plan over 3 – 4 months
• Training plan then implemented in a regimental, authoritative way – not in transformatory way.

In replication, processes get reduced to a bullet in an action plan.

Ironies

Ironic that innovative projects like Nali Kali are on constant trial to prove themselves, Traditional system - not under such compulsion.

• Even though the existing system has such pathetic results and children are functionally illiterate we go out of our way to preserve it.
• Although a government project – management system did involve local self government structures - ZP/TP/GP
• Parallel committees fostered by Departments and Multilateral lending agencies continue.
• Nobody to ensure continuity when external project wound up – not ‘subsumed’ in SSA.

Lessons

Assumption that government backing would be available for a government initiated innovation – not upheld

Erratic teacher transfers play havoc – must be avoided

No shortcuts to processes – processes must be ongoing and continuous

Need to replicate principles, philosophy – not project in entirety

Must develop and implement plan to carry all stakeholders along – don’t brush aside rumblings from the field as irrelevant.

Work with panchayats to build innovative activities into their action plans.

Points To Ponder

1. An important part of Nali Kali was the interaction of teachers in a private school—The Rishi Valley—with teachers in government schools. How can such interaction be fostered on a larger scale in different environments?
2. How did the Nali Kali idea spread from the original schools to others in the area? What are the factors that lead to the spread of such an idea, especially when it involves so much of work by not just teachers, but others as well. How can such activity be co-ordinated in other areas?
3. The Nali Kali programme faced resistance from teachers and parents—the two groups that have the biggest stake in a good system of learning. How can we understand the factors behind this? How can such fears be addressed so as to encourage more innovation in joyful learning?
4. How would you take the Nali Kali experience to other states and other language regions? What will need to be changed, and what essence must be preserved?
5. When these ideas and experiences are taken to other places, can the time span in which they take root be reduced? How?
6. Is this experience relevant to states like Kerala, where the literacy rate is already very high?
7. Does this experience with pedagogy have any relevance to higher levels of education?

12. Key Processes and Functions addressed

Making the school attractive

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teacher situation. All schools follow a multigrade system. In traditional schools if
there are two teachers for classes I-IV, the normal division of classes between
the two teachers would be horizontal, i.e. that one teacher handles classes I & II
and the second teacher would handle classes III & IV. Alternatively, one teacher
would handle classes I & III and the second teacher would handle classes II &
IV. There are several problems in such a division: if one of the two teachers is
absent, children in her classes would be left to their own devices - at best the
teacher present would give them a reading assignment and ask them to ‘keep
quiet/ put your fingers on your lips’. Moreover, in the I & II and III & IV pattern,
the teacher handling classes I & II always has an overload, since enrollments in
these classes are generally higher than in classes III & IV. Thus there is an
uneven distribution of work among teachers.

Nali Kali teachers have devised an alternate arrangement, namely that both
teachers handling classes I-IV be trained in the Nali Kali approach and sets of
instruction and learning material be available with each of them. Having done
this, teachers have made a vertical (rather than horizontal) division of classes.
Thus, if there are say, 30 children in class I, 28 in class II, 24 in class III and 20
in class IV, rather than one teacher handling 30+28 children in classes I & II,
and the second teacher handling only 24+20 children in classes III & IV, there is
a vertical division. In the vertical division all children in the different classes are
equally divided between the two teachers at the rate of 15 in class I, 14 in class
II, 12 in class III and 10 in class IV. The advantage of a vertical division is that
the workload between the teachers is equally divided. If one teacher is absent
due to unavoidable circumstances, children from her class join up in groups with
the children in the other class for the day.

How does the system work in a large multigrade class?

Experience has shown that this system works well with a group of approximately
40 children. The overall teacher pupil ratio for Mysore district is 1:34. But there
are inter-block and inter-school variations in teacher pupil ratios. Most urban
schools and schools in larger villages have adequate, if not surplus teachers. The
position in some upper primary schools is however, distressing - with classes
IVII some of these have only 3 teachers. In such schools classes I-IV function
virtually as single teacher schools. The whole issue of teacher re-deployment is
being separately addressed, and significant (but not yet adequate) work has
already been done in this area.

As with all other systems, the Nali Kali system also does not work too well in a
large class of 50+ children. There is the problem of space and the problem of
availability of activity cards to go round. One teacher said ‘This method is
difficult in a large class of 80-90 children. If there are only 30-40 children they
can sit comfortably. We can give them the cards easily. But with so many
children, there is too much commotion. It’s like mental torture for us!’ Nali Kali
teachers are trying to address the issue by creating, wherever necessary two sets of activity cards for children. Block and cluster resource persons try to make the best of a bad situation: ‘When I look at this school, the corridors are large. We can do activities there. Groups doing activities, which don’t require a blackboard can be made to sit outside. I feel they can make use of the beautiful grounds to conduct activities successfully’.

Multigrade teaching will continue for many years to come - this is an accepted fact. But interventions for re-deployment must take place - and very soon before the present sense of confidence and optimism among teachers peters out - to ensure that every teacher has a manageable number of children to handle.

**How Nali Kali addresses social reality**

HD Kote is a remote tribal block, primarily comprising people belonging to the Jenu Kuruba community. There is a small percentage of people belonging to the agricultural landholding groups - Lingayats and Vokkaligas, and some belonging to the scheduled castes. The tribals depend on forest produce for their livelihood. Often they as well as the scheduled castes migrate to neighbouring Kerala state in search of work, particularly in the cotton picking season. They also migrate to the coffee plantations of Kodagu and Chikmagalur districts during the coffee plucking season. In addition, there is groundnut harvesting in their own villages.

School calendar and timings, as in all parts of the country are inflexible, since it is uniformly prescribed for the whole state. Children therefore tended to be irregular in school, especially during the peak agricultural season. Even if children did not accompany pare nts to other places for work, left to their own devices, they preferred not attend school. Against a prescribed 230 day academic calendar, on an average a child attended approximately 110-115 days of school in the year. In many cases attendance was even more irregular.

Attendance of girls tended to be even more erratic as they were entrusted with the responsibility of looking after younger siblings as also domestic chores.

Most children in the area are first generation learners - a learning environment, pressure from parents for their children to attend school did not exist.

Given this social reality, the approach in the Nali Kali project enabled children to participate more regularly and happily, since -

- Learning in Nali Kali is seen as a continuum from class I-IV; it is not compartmentalized into class-wise content areas
- The activity cards and the class grouping pattern enables a child to learn at her own pace
- The system allows the child to re-enter the learning curriculum at the level where she left off without any sense of shame or humiliation
- Given the fact that children are burdened with household chores as also the fact that children are not likely to get support from parents, the Nali Kali approach does not prescribe any homework. All learning is done in the class.
How Nali Kali addresses problems teachers face in traditional teaching

As one teacher observed ‘teachers equate curriculum only with the textbook. So when we meet to talk about the curriculum, we end up concentrating only on the textbook.’ Traditional teaching is dominated by the textbook, and multigrade/multilevel teaching is not possible in a textbook driven syllabus. Moreover the chalk and talk method followed in traditional teaching creates necessarily a nonparticipatory classroom. In Nali Kali teachers felt that textbooks make teaching learning transaction teacher centred. It also made children dependent on the teacher. The fact that textbooks were not used in Nali Kali made child centred learning possible. Teachers also realise that ‘if we were to bundle up all our learning material, it would form a textbook. The reason for splitting up the material into cards is to allow each child to learn at her own pace.’ Moreover, the classroom management system allows for children of different levels, age an abilities to work together in groups and individually.

As already stated in the traditional system, evaluatory procedures provide only very inaccurate inputs for the teacher to remedy her methodology. In Nali Kali a non-threatening, continual and child-by-child evaluation system enables the teacher to ensure that each child has achieved mastery level learning.

The most precious part of Nali Kali is that the system is designed to develop selfconfidence, self-esteem and a sense of security in the child. Firstly, learning is broken up into the smallest possible units and at every level there are a variety of activities for drilling, reinforcement and usage to enable the child to feel ‘I know it. I can do more!’ The environment studies curriculum allows children to learn through exploration and discovery. Secondly, there is no pressure on the child to rote learn huge portions without comprehending the concept. Thirdly, there is the classroom group management system, which does not create discrimination on grounds of gender or caste or age or ability, but provides for all children to intermingle. Fourthly, the evaluation system is built into the learning process and is entirely non-threatening. No child needs to be afraid of failing - she moves to higher levels of learning at her own pace and according to her own achievement ladder. Fifthly, there is an atmosphere in the classroom that is informal, non-hierarchical and friendly.

Where is nali kali today

1. HD Kote block 1995-96
   Classes 1-3
2. Other blocks of Mysore district 1997-98
   Classes 1 – 3; except for TN Pura block
   where introduced in classes 1 - 4
3. 4 DPEP blocks 1998-99
   Classes 1 – 2
4. 2 Janshala blocks 1998-99
   Classes 1 – 2
5. 8 janshala clusters 1998-99
   Classes 1 – 2
6. 11 DPEP clusters 1999-2000
   Classes 1 - 2
Evaluation in Nali-kali - Indicators of an effective Nali Kali classroom:

No formal evaluation of learning outcomes has as yet been undertaken for the Nali Kali programme. With the expansion of the programme to all blocks in Mysore as well as some blocks outside Mysore, it became imperative to evolve indicators to assess whether the programme is functioning in its true spirit. The Nali Kali teachers therefore, developed a set of indicators for assessing their own performance. A few of these are listed:

1. Are all activity cards arranged as per the ladder, subject and pictorial symbols?
2. Are children able to identify their learning activity in the pictorial achievement ladder?
3. Are children independently able to pick and replace the activity cards in their respective pouches?
4. Are children able to independently identify and participate in groups according to their learning level?
5. Are all learning activities taking place in groups?
6. Are children able to identify their learning achievement in the progress chart?
7. Have all children acquired learning ability in accordance with the programme of work?
8. Is the teacher participating in group learning?
9. Are children filling in the weather particulars regularly in the weather chart?
10. Are the shadow puppet plays performed in the class?
11. Are children able to sing the songs and narrate the stories?
12. Are children able to demonstrate mime activities?
13. Is the children’s blackboard used?
14. Are the craft activities completed by children displayed in the classroom?
15. Are the micro-survey cards used by children preserved?

14. Change Management strategy and Implementation

What nalikali challenged
Classroom management system - being based on a more inclusive organisation of children’s groups
Capacity of teachers to design curriculum and create learning material
Challenged single caste and gender exclusionary group formations
Challenged paternalistic authority of the teacher
Challenged authority of administrators and pedagogy pundits, who were used to a system of centralised curriculum and control from the top

Resistance & conflict - parents
Replacement of textbooks with learning cards attributed to inability of department to produce and distribute textbooks in efficient and timely way.
Why no homework?

Resistance & conflicts - teachers
Fear of change – fear at abandoning textbooks
Teachers in expansion areas did not ‘own’ the system as the original group of HD Kote teachers did.
Many teachers not open to rethinking conventional notions of order and discipline

What's-wrong-with-the-existing-system? syndrome; ‘experienced’ teachers – unwilling to explore alternative approaches – fearful of changing the power equations in the classroom

Complaints about repeatedly having to create learning cards by hand
Intermittent rumours/ alarms that the programme would be closed down caused insecurity.

**Resistance & conflict - Cluster functionaries**

Pull of competing loyalties – the needs of the programme against the need to adhere to the centre of power at block and district level.
Block/district functionaries
Not interested enough to fully imbibe Nali Kali spirit and philosophy
Averse to the idea of being trained by primary school teachers
No handholding of teachers who found it hard adapt to the new system

**Resistance & conflict – departmental**
Some indifference at higher levels

Used to piecemeal curricular, textbook reform; uncomfortable with process of comprehensive reform covering curriculum, TL material, training, evaluation and classroom management

Success of Nali kali challenged their superiority as 'pundits’ visits

Under the guise of creating workbooks/ supplementary material to help the programme, initiative wrested away from teachers by experts in Bangalore.

Constant demand for proof of learning achievement – even before system of 4-year curriculum continuum could be put in place Some doubts – are we making guinea pigs of marginalised rural children?

Lessons learnt -

DPEP could have treated HD Kote as a learning lab till class 4 – evaluated it, and then gone to scale. But well intentioned administrators saw urgency in spreading programme to reach a much larger group of children

In replication, time for processes were not factored in 'Ownership’ necessary for replicability not adequately considered.
Original process spanning 3 – 4 years collapsed into a training plan over 3 – 4 months.
Training plan then implemented in a regimental, authoritative way – not in transformatory way.

In replication, processes get reduced to a bullet in an action plan.

Ironies

Ironic that innovative projects like Nali Kali are on constant trial to prove themselves, Traditional system - not under such compulsion.

Even though the existing system has such pathetic results and children are functionally illiterate we go out of our way to preserve it.

Although a government project – management system did involve local self government structures - ZP/TP/GP

-Parallel committees fostered by Departments and Multilateral lending agencies continue.

Nobody to ensure continuity when external project wound up – not ‘subsumed’ in SSA.

Lessons

Assumption that government backing would be available for a government initiated innovation – not upheld

Erratic teacher transfers play havoc – must be avoided

No shortcuts to processes – processes must be ongoing and continuous

Need to replicate principles, philosophy – not project in entirety

Must develop and implement plan to carry all stakeholders along – don’t brush aside rumblings from the field as irrelevant.

Work with panchayats to build innovative activities into their action plans.
Points To Ponder

1. An important part of Nali Kali was the interaction of teachers in a private school—The Rishi Valley—with teachers in government schools. How can such interaction be fostered on a larger scale in different environments?

2. How did the Nali Kali idea spread from the original schools to others in the area? What are the factors that lead to the spread of such an idea, especially when it involves so much of work by not just teachers, but others as well. How can such activity be co-ordinated in other areas?

3. The Nali Kali programme faced resistance from teachers and parents—the two groups that have the biggest stake in a good system of learning. How can we understand the factors behind this? How can such fears be addressed so as to encourage more innovation in joyful learning?

4. How would you take the Nali Kali experience to other states and other language regions? What will need to be changed, and what essence must be preserved?

5. When these ideas and experiences are taken to other places, can the time span in which they take root be reduced? How?

6. Is this experience relevant to states like Kerala, where the literacy rate is already very high?

7. Does this experience with pedagogy have any relevance to higher levels of education?