

A Note on Navnirmiti Learning Foundation's Programme

About Navnirmiti Learning Foundation

Navnirmiti Learning Foundation is a Self-Reliant Organization (SRO) Working to Promote

- Universalization of Quality Education
 - Viable and Decent Employment
 - Cooperation
 - Science for All
 - A Scientific, Secular Culture
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A note by Navnirmiti Learning Foundation:

Universalization of Quality Education: A constitutional mandate

Quality Education is the right of every Indian citizen between the age of 6 to 14. National Curriculum Framework 2005 has been notified as a curriculum framework for RTE. It defines 'Quality' as follows: 'The formal approach, of equality of treatment, in terms of equal access or equal representation for girls, is inadequate. Today, there is a need to adopt a substantive approach, towards equality of outcome, where diversity, difference and disadvantage are taken into account. Education must empower them to overcome the disadvantages of unequal socialisation and enable them to develop their capabilities of becoming autonomous and equal citizens'.

Sarva Shiksha Abhiyaan (SSA) has been declared as the official Vehicle for implementation of RTE. SSA quality framework document says, 'A rights framework is a major shift which implies that the 'compulsion' is on the State to ensure learning of equitable quality for all children. In the earlier framework the responsibility was often placed on the children themselves by labelling them as 'disinterested' or 'slow learners', or on parents who were assumed to be 'unaware, uneducated'.

This is possible only by **systematically strengthening the government school system** through a Comprehensive Quality Mass Programme. This programme should use pedagogy for 'Every Child's Learning', systems for mass implementation, measurable and verifiable evaluation of childrens' achievements and of systems. Through this we should target for systematic, continuous, incremental improvements every year.

This can be achieved through a process for Continuous improvement through successive approximations.

- Start a programme having high level inputs and processes
- Three party team (officers, teachers and external experts) assesses the outcomes using a scientifically designed test
- Modify the inputs and/or processes after studying the outcomes
- Assess again after one year.

To implement this on a large scale, we need to use Demo Seed Model in which we demonstrate seed successes and through them, we reach out to larger numbers. This is different from doing a 'pilot'. In demo seed model, the teachers implement the programme in their classes and become good trainers in this process.

A Roadmap with Demo Seed Model

- Define a clear plan by participation of all stakeholders including teachers.
- Introduce rigorously in 80 schools during first year and create SEED SUCCESSES in these schools. Capacity building of 160 teacher RPs, BRPs, EOs and selected CRPs for this process. Form state and district resource groups in first year.
- Upscale to 800 schools with the help of this team during the second year
- Upscale to 8000 schools during the third year
- Upscale to 80000 schools during the 4th year
- Consolidation during 5th year

Navnirmiti Learning Foundation proposes to help the government system and UNICEF to implement Universal Active Math (UAM) programme as a demo seed model.

Universal Active Math Programme (UAM)

UAM is a comprehensive programme for universalization of mathematics education. This is tried and tested in realistic situations.

We do not create any parallel system.

We believe in strengthening of the government system and resources.

Universalization necessitates Appropriate pedagogy and Systems for mass implementation.

Two-step Pedagogy for Universalization :

Key to Every Child Learning Mathematics is 'Learning by Understanding and only by understanding'. In step 1, children understand a new concept in the familiar language of activity and things. In step 2, this understanding is translated into written language of numbers and symbols.

Two-Step Pedagogy can be used for almost all concepts upto class 10. The key is every child solving problems on her own.

UAM Systems for mass implementation

- Participation of all stakeholders (Dept of education, SSA, UNICEF, representatives of teachers' organizations) right from programme design stage.
- A specially designed Mathkit
- Workbooks for children
- Capacity Building:
 - Formation of Key Resource Group (KRG) for the state.
 - Regular interactions with KRG
 - Teachers' intensive workshops with the help of KRG
- Assessments- CCE :- Practical, Mental Math, Oral, Written

- Regular follow up interactions with teachers- Onsite support by CRPs, BRPs, DIET personnel (No parallel system by Navnirmiti Learning Foundation)
- Intensive interactions with KRG at regular intervals
- End year random sample evaluation by three party team – teachers, officers and Navnirmiti's Master Resource Persons

UAM is Tried and Tested in :

- 4 schools of Arya Vidya Mandir group in Mumbai (Classes 1 to 4) – 2001-2005 – Still using UAM
- In all schools of 3 Nagarparishads of Chandrapur through Unicef (Classes 1 to 4) – 2002-2005 – No idea of usage today
- In all government schools of 3 blocks of Goa – through Dept of Education and SSA Goa (Classes 1 to 4) – 2007-2010 – No direct contact with the system today
- Currently running in all schools of Tulashikhar block of Tripura through Dept of Education and Tata Trusts (Classes 1 to 10) – From 2015
- Many private schools- Marathi, English, Hindi, Urdu.

An Example : UAM was implemented in primary schools in three blocks of Goa State (2007-2010). In Cancona block during first year the overall average achievement level for four classes reached 75%. During second year it further improved by 7% to reach 82%.

Many Teachers of these three blocks are still Using UAM even though we have not interacted with them since last 7 years.

Details of Capacity Building Workshops done by our team (1999-2018) :

- For schools affiliated to CBSE, ICSE, IGCSE, SSC, etc
- For government schools, private aided schools, private unaided schools
- For government teachers, state resource groups, DIET personnel etc.
- In almost all states of India covering **more than 25000** participants
- In Turkey and South Africa

Learnings

- Systematic rigorous implementation of Universal Active Math Programme can take an entire block towards attaining universalization of mathematics (85% x 85%).
- The programme should be implemented as the mainstream programme and not as a parallel programme.
- The results of Cancona block were the best among the three blocks because all stakeholders worked in close coordination with each other for the same objective. No parallel structure was created for this programme.

A similar programme for Universalization of Science is under development in partnership with Edugenie Guwahati.