

Generating Mass Movement for Creating Quality School Education for All

Ram Takwale, President, I-CONSENT, India
Martand Deshmukh, Secretary, I-CONSENT India
Vivek Sawant, MKCL, India
Mohan Menon, COL, Canada.
Som Naidu, Australia,

Key contact: ram_takwale@eth.net

Abstract

This paper reports an initiative by a group of institutions and individuals who have worked together to develop school and teacher education programs on e-Platform developed by MKCL. Its goal has been to develop a new paradigm of education for large numbers with connectedness for offering Quality School Education for All, and for sustainable development of local situations, that is, classrooms, schools and local community by linking them to the global context. The two programs that are part of this initiative are an online B. e-Ed. and Virtual School and Learning Homes (VSLH). These two programs enable an experimental and exploratory way of learning and preparing teachers for exploratory learning using situated learning designs based on constructivist pedagogy. It also aims to develop a mass Olympiad movement to support multi-level, multi-stage nurturing and assessment of learning. Quality of education in teaching and learning is considered at three levels - content, processes and systems. A program of developing mechanisms, sharable and common wealth is undertaken to support quality in a distributed e-education system. A model of management for working, learning and developing together on an e-platform that offers a level playing field for all is being developed in order to address Indian problems of large numbers, disparities and divides.

CONTEXT AND MOTIVATION

India faces many challenges which are related to large numbers and disparities in levels of poverty and education. The school system in India is very large and involves nearly 20% of its population as students, teachers and parents. In the state of Maharashtra alone (which accounts for nearly one-tenth of this statistic) there are 89, 000 schools, 17 million students, half a million school teachers, 8 to 900 thousand school related committee members, more than half a million private tutors who earn their livelihood (whole or in part) through education and nearly 2 to 3 million parents who spend some time everyday to attend to their children's home schooling. This totals to more than 22 million in a population of 110 million in the state. The school system is one of the biggest social systems which presents a challenge to develop the appropriate organisation and support of a high quality of education in preparing the young generation for the future. Globalisation has further complicated this challenge for offering quality education at

lower costs for making our youth worthy for employment and livelihood in the emerging global markets. Indian disparities and diversities in relation to language and socio-cultural and economic standards are quite large and widening the economic divides, and therefore need very special socio-economic considerations to offer quality education for all. (Project Report, 2007)

A decade ago, it was practically impossible for research and activity groups to think of mega systems while experimenting in the field of education. The experimentation and reforms carried out so far are mostly limited to small micro experimentation to reform the educational processes and systems at macro level. The wider accessibility of information and communication technologies (ICT) to increasingly larger numbers of people, places, civil institutions, industry and other socio-economic areas has created possibilities of considering large social systems. India now has the connectivity to reach out to nearly 25 % of its population through telephony- landline and mobile- and it is expected to reach nearly 70 % by 2015. The broadband and newer technologies such as triple/multi-play broadband with fast processing speeds and miniaturisation of communication gadgets and their wider use is making them people's technologies and offering wider choices and ways to use ICT tools and techniques that are now available to solve local issues and participate in local development and transformation. This scenario needs a well-designed large techno-social system (LTSS) that can accommodate millions of learners and change makers to solve problems of life and work in the light of globalisation and new global markets.

In our design, globalisation due to ICT is manifested through adaptation of various new processes not known in the last century. They are IT induced (digitisation, virtualisation and mass-personalisation), developed by connected people (global standards, open resources, mass-collaboration, self-organisation, etc) and processes based on open knowledge resources such as "prosumers", "co-creations" and "wikinomics". (Toffler 1981, Prahalad 2007, Tapscott 2006).

Our transition from industrial society to an information society has quite a different requirement at local levels. We need designs and models that cannot be projected on the basis of processes and models of the past century. In order to be relevant and successful in the future too, a model has to be based on future scenarios created by change makers and its judicious combination with the local situations existing now to solve the real life problems of development and transformation. These are future scenario based situated learning designs such as the Future-Now Model. (See note and Atkins & Edwards, 2007) The development of a new design and model requires a completely new set of visions, goals, values and approaches that form the foundation of any educational system. Such a program is therefore designed on the success stories of change makers in our region at micro levels and their adaptation into e-processes on an e-platform which can form an open cyberinfrastructure that is essential for a connected society with A3 scenario (A3 = anyone, anywhere, anytime). The challenge is therefore to develop a new paradigm of education with mass participation in a large techno-social system suitable for a connected society.

We are also inspired by the concepts of educational revolution mostly on the basis of Mahatma Gandhi's *Nai Talim* (New Education) incorporated in Education Commission Report (1966) for linking schooling with working through production and service learning. The 1966 Education Commission Report implementation subsequently failed to generate any revolution. But it now has a chance of success since it can be piggy-backed on the communication revolution. (Naik, 1982; 1985; Takwale, 2006). Hence the final goal of our program is organising development and change processes by integrating living, working, learning, developing and transforming continuously in a globalising world. This work is made possible via an e-platform developed by the Maharashtra Knowledge Corporation Ltd (MKCL). This e-platform has the capacity to extend and expand to all the places and people in Maharashtra and outside to accommodate millions.

The programs developed for generating mass movement for quality school education are therefore activity and action oriented in which best and successful practices are scaled up by integrating them into a design and model that is grounded in the context and culture of the situation (Naidu 2008). This approach will need to combine learning, developing and transforming into a mode of education in which all formal, non-formal and informal modes merge and transcend into a new system- the transmode system of education for connected society.

The work undertaken in this regard is quite ambitious and needs cooperation and collaboration of individuals and institutions in large numbers. During the last three years we, a group of institutions, organisations and individuals, have been working together informally to evolve programs and activities in school education that are presented in this paper. The group is now constituted into a formal partnership in a form of consortium namely the Indian Consortium for Educational Transformation (I-CONSENT), to support and develop the new paradigm of education. I-CONSENT and its activities are continuously supported by the COL and MKCL and a model of management and organisation is developed.

CONCERNS, PROCESSES AND APPROACHES

The concerns addressed, processes and approaches developed by I-CONSENT for **Generating Mass Movement for Creating Quality School Education For All (QS-EFA)** are given below. The details of programs and activities are given in Annexure.

- **Development of Virtual School and Learning Homes (VSLH):**

The Indian system of education is often criticised for its high dependence on rote-memorisation, learning from books with very little understanding, application and action learning. Against this the 'Hole in the wall' experiment carried out by Sugata Mitra (Mitra, 2005) has shown two major results: first, given large free information resources made accessible through some technology (networks and computers), children organise, explore and learn, and, second, given motivation and challenge, students learn well without teacher support. These results reinforce the concept that learning is instinctive

and natural and can be promoted with minimum invasion (*ibid* Mitra, 2005). This does not eliminate the role of a teacher but changes it substantially if learning resources and motivation are created in the system.

I-CONSENT has developed an online Bachelor of eEducation (B.eEd) program for teacher education, and VSLH for school education which contains SEVEN Program Units.

I-CONSENT Programs and Processes for QS-EFA

No	Program Unit	Larger Goal	Processes
1	<i>Prayog Pariwar Kendra's</i> (PPK)- Group Experimenting Centers	Education through Virtual School	Experimental and exploratory learning for development
2	Nurturing Excellence and Talent Services (NETS)		School Olympiads to support multi-level, multi-stage nurturing and assessment
3	OER for School Education	Quality in e-Education	Development and unitisation of open school educating-learning resources
4	e-Teacher Training (eTT) linked with online B. e-Ed program for situated development		Continuous teacher training program and support services for situated development
5	Learning Homes and Community Empowerment (LHCE)	Mass Access with equality	Mobilisation of L-groups / L-communities based on special interests and their empowerment through education, technology and organisation.
6	e-Platform and Support Service (ePASS)		Creating connected community of students, teachers, parents and local leaders with approach of offering level playing field for all.
7	VSLH Program and Partnership Management	Cooperative and collaborative working, creating and management	Partnership and program management for creating sharable common wealth

- **Development of Virtual School education**

The two Program Units (PPK and NETS) of VSLH take care of teaching, learning and evaluation processes of Virtual School.

The experimentation, which is quite neglected in majority of the schools in India is supported by the PPK, which aims at developing learner's talent through exploratory way of learning. The Virtual School is developed through a network of 15 Centers in Pune district having learning and lab facilities all linked to the e-platform. The lab network will be developed to ensure its sustainable and replicable nature and will be replicated throughout Maharashtra from the second year of operations. Each Center has local as well as central tutoring and guiding facilities with audio-graphic distributed classroom. The MKCL network with large number of access centers (3, 500 throughout Maharashtra with total e-governance and LMS supporting learner personalisation) are being used to extend access to networked teaching and training services. The nurturing program is started with a concept of school Olympiad carried out at three stages: mass Olympiad, class Olympiad and talent Olympiad examinations after offering nurturing services at each stage through web-based and distributed classroom-based interactivities. The first trial pilot carried out during December 07 – April 08 has yielded satisfactory results with 7, 647 students registered at 394 access centers for the mass Olympiad, 4, 400 students at 90 centers for class Olympiad and this activity is in progress. The first pilot is in high school science and is directed towards sending five top medallists from this Maharashtra School Olympiad to the National Training Camp at Homi Bhabha Center for Science Education, Mumbai, and some may get into the final squad to be sent to the International Junior Science Olympiad 2008. The program is at the initial stage of development.

The Virtual Schools combine many innovative activities and success stories from Maharashtra and India which are not given curricular support nor they are regular school extra curricular activities. They are mostly supported outside schools and are accessible in very few urban centers in Maharashtra. However they have great impact in talent nurturing.

- **Concerns of QUALITY for All**

There are three aspects of QUALITY in education that needs to be addressed at three different levels:

- Content and process quality
- Fitness quality of content and processes
- Transformative quality of the school system

The first one is usually addressed through the standardized norms and processes. The fitness quality is considered in our programs through situated development and the third one through outcomes and impacts of the system being designed and developed

The two Program Units, OER and eTT, cater to the needs of assuring quality.

Our challenge is to develop OER for schools and design its learning content with constructivist pedagogy that is meaningful and relevant for students, teachers and parents. The OER content should enable mass-personalisation and group customisation to support their learning for development-particularly in situations of classrooms, schools and community. Constructivist design is prepared and content is under development which will support learning by doing, exploration and innovation. Another challenge is to

develop large number of locally and centrally-located teachers who are able to support learners in their development.

The e-teacher education program will lead to online B. eEd degree. It is supported by COL and MKCL via online learning platform and its launch and pilot run will start from April 2008. This online B e-Ed is also being linked with school teacher training, eTT, in VSLH. The teacher in training program is taken with wider meaning- one who supports learning- and includes public, private and parent teachers. The teacher education program is based on various roles the teacher is expected to perform in e-education in a connected community of students, teachers and parents, such as net worker, e-culture developer, e-learning specialist, learning resource developer, teaching learning specialist, teaching learning strategist, evaluator and researcher etc. This program is being developed using a learning design that is based on constructivist pedagogy. No written examination at the end is contemplated, rather the evaluation is a continuous process and final assessment of the student's performance is done on the basis of a portfolio and project work (see Naidu, 2008).

The VSLH will be used as a practising place for the B. e-Ed program for developing situated learning and situated development.

Our major concerns in these programs are: development of e-culture, reflective thinking in teachers and students, and impediments of the existing system rigidities and devices to throw out change programs. The new paradigm has to take into account these constraints and develop appropriate bridges and integrating strategies.

Concerns in MASS MOVEMENT

The two Program Units of LHCE and e-PASS support participation of parents and the community in schooling and in extending outreach of VSLH to all to ensure mass participation.

LHCE aims at ensuring participation of parents and the community in the Virtual School, and consists of activities of mobilising learning groups of parents and their communities and of empowering them through educating, organising and using mass communication technologies to address their problems of development and change.

An organic link of community activities with the development of the students and schools needs to be established. The school program of project work in each subject introduced recently in the National Curriculum Framework for school education can be used effectively to study nature, environment, industry and community related issues. In this the parent and community participation with a view to improving abilities and capabilities of students with an approach to developing situations will be considered. A program of 'Project Olympiad' could be designed and developed to promote production learning, service learning and innovative learning through group projects.

The e-platform is a customisation and extension of existing e-frameworks of digital university and finishing school of MKCL and it will be further developed and customised to incorporate activities and developmental processes with a view to offering mass personalised education and mass collaborative work. The goal of the e-platform is to extend access to all in Maharashtra and develop an open access system. Access to all will depend on social and State policies and, it is hoped, LHCE programs will help in developing such social and public policies incorporating equality and inclusion.

Another purpose of developing the e-platform is to have total administrative and academic support services to any program deployed under the umbrella of I-CONSENT. The academicians then can concentrate entirely on content and quality of teaching-learning processes. The e-platform promotes public-private partnership to offer courses to learners in the network and can have their own marketing objectives within the framework of the I-CONSENT.

The goal of mobilising the learning communities is to empower and enable them to participate in the public-private-community (PPC) partnership with a win-win approach.

MODEL OF VSLH AND SUSTAINABILITY

The development of a model of e-education with A3 scenario gives us an opportunity to move ahead from a: *teacher centric and content-centric education* → *a learner-centric and a learning-centric education* → *a development-centric education* → *a 'trans' formation-centric education*.

The program of VSLH is based on a global + local model and aims at developing quality education for all. The model has to be useful and sustainable in the Indian situation of diversity and disparities, particularly of urban-rural nature, and should enable to support socio-economic transformation towards a knowledge society.

The VSLH also creates knowledge and learning resources and network mechanisms which form the common and sharable resources for all. The common wealth of VSLH is:

1. OER
2. Interest based L-Groups and L-Communities
3. Network of L-centers and lab work facilities,
4. School Olympiads with support mechanisms
5. e-Platform for level playing field,
6. Bank for resources, credits for assessment and certification,
7. Training and research network

Continuously increasing this common wealth may have a gravitational effect that could help in attracting and retaining partners and partnerships, and help in promoting prosumers and co-creators whose products and services could be marketed through partnerships. In fact the development of livelihood and 'earning' models at different levels of consumption and personalisation is a focus of the sustainability of the program.

Provider partnership for the two programs of the online B. e-Ed and VSLH is formed and I-CONSENT will be managing these programs through the programs and activities by managing:

- **Provider Space** for offering programs and activities with public-private partnership,
- **Learner Space** for enabling learners to participate in learning for development, through PPC Partnership.
- **Resource Space** for creating sharable common resources.

The management of these activities is to be based on a common vision, goals and values and transparent operational and accountable mechanisms evolved to support development and deployment of the program. The details of programs of VSLH are given in the Annexures.

Acknowledgement:

Our report is an outcome of the efforts of large number of individuals and institutions who are working together to develop a new educational model. Some of them are cited in this paper, but there are many others who are contributing just as much to the development of this program. The leaders amongst them are:

- PPK, NETS: Chanrashekhar Desai, Yashodhan Kale and M G Takwale
- OER, eTT/ e-B e-Ed: S. C. Agarkar, Narendra Deshmukh, Veena Deshmukh, Anant Joshi, Sanjeev Sonavane
- LHCE, e-PASS: Revati Namjosh, Amit Ranade, Jayashri Shinde

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Note: The above two papers of Daniel E Atkins and Paul N Edwards give the need for Long Now of Infrastructure to be developed for the 24x7 lifestyle with multi-connectivity. Our paper talks about future scenario based situated learning for development in A3 scenario, and considers futures created by the ICT leaders in the next or long time situations. In this model, the future scenario is rooted in the situation existing now; and hence future now model.
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ANNEXURES

Annexure 1:

Development of Virtual School Education

By

Chandrasekhar Desai, MKCL, India

Yashodhan Kale, NETRA, India,

M G Takwale, NETRA, India

Virtual School through two Program Units, Experimental Learning Centers (*Prayog Pariwar Kendra* -PPK) and Nurturing Excellence and Talent Services (NETS), will essentially develop virtual education, which will need, as in case of formal schools, all the facilitations and structures to carry out functions of teaching, learning, experimentation, evaluation, administration and also provide for interactivity and exploration spaces for all its students and staff. It will also need educational environment that avoids the drawbacks and deficiencies of the existing school system. Experience of working with schools, teachers and students in Maharashtra have revealed that the existing system seriously suffers from:

- Poor experimental and work culture
- Dominance of written examinations and administration.
- Competitive spirit and lack of cooperative work culture.
- Poor recognition to good teaching and dominance of ‘managers’ in the system.
- Falling ethical / moral standards and lack of good educational leadership.

Without going into the reasons why this is happening, the Virtual School will like to avoid all these deficiencies by designing and developing a new and appropriate model school education, in which operations and activities will be based on core ethical and moral values, such as openness, transparency, accountability, democratic and participative practices.

The program of Virtual School and Learning Homes (VSLH) is developed by employing not only new processes of information age, but also practices built on the success stories of innovative ways of promoting learning and talent nurturing. They include an exploratory run successfully for more than a decade, talent nurturing carried out for Olympiad examinations by some devoted teachers, methods of training and assessment evolved by Homi Bhabha Center for Science Education (HBCSE) for nurturing talent and promoting school Olympiads etc. There are many success stories of innovative school leaderships offering very good education. However they are neither replicated nor replicable. All these institutions and organisations have ample expertise and local content

that could be used in the formulation of virtual school education. The VSLH is following this inclusive policy to seek cooperation and participation of the institutions and experts as partners at development or delivery stages of the networked education of the virtual school.

The approach is to transform the content, expertise and experience from success stories into e-methods and processes by putting them appropriately in the digital education frameworks developed by the MKCL.

The School Olympiad system used for a few talented students is now transformed for mass, class and talent Olympiad to be offered to all. The Olympiad will be developed more for cooperation than competition. The purpose is to make school Olympiad, an ideal instrument and system for non-competitive, cooperative and appreciative assessment and award process to promote quality and excellence.

PPK for Learning through Experimentation and Exploration:

As a pilot, 15 PPK centers are established in the district of Pune, one each at block center- Taluka Lead Centers of MKCL in the chain of 350 such centers in Maharashtra. In order to avoid issues of access to IT in rural areas and to establish a workable business model, initially the PPKs are established with the help of private providers, who also share cost of establishment of the center.

The goal is not to create a parallel system, but to demonstrate that the program succeeds along with a business model in small townships and rural areas and can be replicated in other schools.

Each PPK center has the facilities of

1. Science laboratory to do all experiments of high school standards.
2. Distributed classroom with audio graphic faculties for real and virtual interactivities.
3. Computer lab that offers access to net worked and web resources.

For personalised tutoring a ratio between students to teachers is ten to one. The working is during the free hours of students with their convenience. The courses offered are:

- Learning of science through experiments.
- Exploratory learning and projects in science.
- Nurturing in school science.

The teaching-learning processes are organised through

- Doing lab work at PPKs
- Web based and local center based learning by carrying out activities and by solving problems and assignments.
- Learning through distributed classroom.
- Solving problems through group discussions (Self or Tutor organised) through real and /or virtual groups.

- OER and other internet resource based learning.

A personalised record of learning will be kept with the help of LMS.

School Olympiad: A Mechanism for Nurturing and Promotion of Self and Group Learning:

In order to create motivation and promote self and cooperative learning, school science Olympiad programs are being evolved.

It is proposed to develop a system of school science Olympiad for promoting nurturing in two areas:

- School Science Olympiad, and
- School Project Olympiad.

Each Olympiad will have multi-stage (primary, secondary and senior secondary) and multi-level activities for personal and group achievements. Each year the cycle of operations of testing will be carried out at three levels; first to test basic subject understanding (*Sambodh*), second to test proficiency (*Pravinya*) and third to test talent (*Pradnya*) in science subject and will be carried out through THREE examinations called mass, class and talent nurturance and assessment of student performance. Nurturing and formative testing opportunities and services are made available before each examination. A pilot is launched in high school science subject. After developing a cycle successfully the program will be replicated in other subject areas and at other stages.

The goal is to offer nurturing and learning opportunities with wider access to resources, static as well as dynamic, and enable students to interact in real and virtual space with peers, experts and central resources to develop individually and in a group. The global and resource based learning offers to students many channels of development, and, along with a support system, students may be helped well in their innate intelligence and capability development.

The Virtual School also promotes preparing students for various schemes of award and search undertaken by the State and Central Government Departments of Education. (such as National Talent Search, School Scientist Promotion Plan –KVYP, scholarship award exams, etc.)

A Pilot of Science Olympiad:

The first pilot program in high school science Olympiad has been launched and the pilot cycle will be over by 2008 April end. Five top medallists of this Olympiad 2008 will be admitted in the National Training Camp of May 2008 organised by Homi Bhabha Center for Science Education and some medallists may find place in the squad for the International Junior Science Olympiad (10th standard). First regular cycle of this Olympiad will be carried out during the academic year of June 08- April 09.

An idea of Project Olympiad is under active consideration. The goal of the School Olympiad is to have a mass movement, Maharashtra School Olympiad Movement, to promote nurturing programs at local levels with fair and open competition at block, district and state /national levels; and offer promotion and recognition to teachers and schools for good performance. The International school Olympiad practices will be followed in assessment and award of medals to successful students.

The first pilot cycle has good response with participation of 7647 students at 394 access centers of MKCL from all the 34 districts of Maharashtra. Nearly 80 % of these (6197) were promoted to the second level examination. Out of them 4400 students have appeared for the class test. Top 750 students will be selected for talent nurturing and assessment for the talent test for the award of School Olympiad medals. A plan is to award 35 medals, with 4/5 gold, 7 silver, 7 bronze and the rest with appreciation certification.

The nurturing program is carried out through web based instructions and sample problems at the mass level, through distributed audio graphic classrooms at class and talent levels. It is proposed to offer nurturing services at the talent level by crating a single virtual classroom for all the students. In this classroom, students will be given challenges to solve difficult problems & assignments and interactivities with expert teachers along with central learning support services. The pilot cycle will be over by the end of Arpil 08.

The pilot cycle has shown interesting results:

- Enrolment pattern shows that there is a need and expectations to have such nurturing programs in rural areas.
- Even hilly and backward districts have registered enrolment.
- Many rural districts have good enrolment showing either keen interest or on-going local nurturing activities.
- Big Municipal Corporation cities like Mumbai and Nagpur have registered low numbers.

The next cycle and programs will be streamlined and expanded to make the system better with addition of quality factors such as training programs for teachers, virtual class room based regular assignments and challenging exercises, regular interactivities with expert teachers and scholars, personalised guidance from tutors etc.

Concerns:

The programs are however facing the issues emanated from the traditional school teaching and assessment system and the mind set of the teachers, parents and management. There are many interests that do not like to change and may create tensions in VSLH development. Under these circumstances the approach is to use the well accepted programs and activities in the National Curricular Framework for school education prepared by the NCERT and adopted by the Maharashtra State Department of Education. The spirit and programs introduced in the new School Framework cannot be

easily implemented on a scale of the school system in Maharashtra and need e-system support, which we propose to evolve through these two programs of VSLH. Bridges will be built and common action programs will be evolved to promote public-private partnership.

Annexure 2:

Resource Based Quality School Education

By

S C Agarkar, HBCSE, India
Narendra Deshmukh, HNCSE India
Jayashri Shinde, SNTD Women's University, India

The two Program Units, Open Education Resource for Schools (OER4S) and e-Teacher Training (eTT), of VSLH add quality to the Virtual School programs by offering quality resources and training to teachers. The OER is so organised that it can be easily used by students and teachers at PPK centers or through internet access or through MKCL network of 3500 access centers.

OER for students is at present under construction and development. It uses the constructivist approach and creates various spaces and facilities for student's learning and working. All these are at various levels and Learning Objects will be developed / obtained and deposited in two ways: in packages such as courses, pp-presentations, lectures with available media, etc., and in the formats of reusable learning objects (RLO). On the whole structure for students, teachers and parents is similar in nature but differing in content, standard and purpose.

OER Spaces for Student Learning

Student's space is divided into FOUR parts:

1. Information space,
2. Interaction space,
3. Creation space. and
4. Learning tools and technologies

The information is further classified for different stages of K-12 and levels of achievements. It stores contents in packages already used for studies (books, courses, self-instructional materials, etc.) for lectures (pp presentations, slide sets, etc.).

The RLO's are stored in Information space in various layers. The layer for Content with categories – information / facts, concepts/meaning, procedures/experiments, theories/principles and development/impact. The other layers contain information about the media used and the performance assessment measures in learning. The interaction space provides for action oriented learning achieved through individual or group efforts. The creation space provides for various types of approaches and methods for assessing developmental and creative activities such as projects, services, innovations, etc.

A provision for learning tools and techniques for all the three stakeholders is made in a different space as given above. After developing architecture of students' spaces the other spaces will be taken up for development.

A workshop organised recently for creating content for OER was attended by about 80 expert and experienced teachers. They created many different formats of content, which makes it essential to create additional boxes for storing the information. This activity is in progress.

Dynamic OER

The goal is to make the OER4S dynamic tool for learning working and creating. It will also be associated with many activities to ensure wider use of OER. We are having plans for developing a *question answer forum* for the all stakeholders with a focus on the questions raised by students. A child will be encouraged to send his/her question through email which would be answered by an experts in the field. The answer would then be stored in the 'Why Files' of the website for the use by a large number of students and teachers. Anyone who reads the answer is free to modify it as per his/her interest and background. In fact, the program aims at making all the stakeholders (teachers, student, parents and researchers) equal partners in the development and implementation these resources.

The content of OER will be in English and Marathi the regional language of Maharashtra. However, for the sake of rural areas, vital and essential information will be translated in Marathi.

Teachers' Training

Based on the support of OER4S which contains content for teachers also, a program of training is being planned at two levels: one for those who can create and edit content in various forms and the other for using OER for offering quality education and tutoring with personalisation.

Another program planned to make VSLH effective is to organise training of teachers linked with the activities of Virtual School and Olympiad programs. It will be developed on the basis of requirements of PPK and NETS for school children .