



## **THE PRESIDENTIAL AWARD WINNING COMPUTER LITERACY PROJECT**

### **Background:**

Central Railway School Kalyan an English Medium School established in the year 1918 had student strength of about seven hundred and Staff of about twenty in the beginning of Nineties. Education not being a core activity of Railways the school was not in the focus of Railways and almost 90 percent students were the wards of Group-D employees of Railways. School had standards I to XII with Commerce Faculty in Senior Secondary section. The school was not providing a competitive learning environment for the overall development of students. There was no pre-primary section and the students admitted could not cope up with the medium of instruction since most of them hailed from semi-literate parents.

Standardization of education by offering quality services was a prime concern and we could succeed in that by providing hundred percent success rates in the academic front that was once a mediocre area. Being not satisfied with the mere academic achievement we wanted to provide a more competitive learning environment relevant to present day requirements.

Goal oriented and pupil friendly methods in teaching and empowerment through technology aided learning that makes pupils fit for emerging job markets was a must. A turnaround was imperative to change the learning environment to save a sinking institution in the paradigm shift caused by sweeping changes in Information Technology.

### **Priorities and Purposes Behind the Project:**

Education sector in India was facing challenges emerged due to the impact of Information Technology and the nation was on the way of a metamorphosis from Globalization. Setting of new standards of education and provision of technological competency for students to get adapted to the changing scenario was a must. Capacity building is the prime priority of education and that was not possible without Computer Literacy among students.

The purpose behind this project was to provide the requisite technological education through infrastructure building in an indigenous and sustainable manner without causing burden to any stakeholders. We also had a vision to produce students who are fit for the upcoming I.T. enabled job market of India. Another purpose was to use Computer Aided Learning a tool to make teaching and learning methods more lively and interesting and the quality of services provided through the school more competitive.



**Strategies Adopted in the Project:**

First step in the pursuit of this pioneer project was to approach the Railway Administration to provide necessary infrastructure for starting the computer education in School. Since computer education in Railway Schools was not in the agenda of Railway Administration ten years back, the authorities turned down the proposal put forward.

The Project Coordinator, a Post Graduate Teacher who had no computer engineering background took interest in getting acquainted in the hardware and software side of computers along with his regular teaching assignments in the Junior College Section. He envisaged to build up a project with ten computers using basic software and invited the parents of the School to come together to finance this project with an initial monthly contribution of Rupees Thirty that may provide the initial capital to assemble ten computers for commencing the project in the year 1999.

After getting requisite administrative permission from Railway administration he motivated the parents to form a Parent Teachers Association to monitor the progress of the project and to act as a watchdog for keeping transparency and accountability in all future aspects of the project.

Collaboration with the primary stakeholders (students and parents) to start this venture in a self financing scheme was a primary strategy adopted. At the same time the Service Provider (Railway Administration) had to loose nothing except to allow the already available classroom to be modified into a computer laboratory.

Providing leadership and guidance by doing it along with another regular full time teaching job in the same school by giving extra hours of labour for no additional remuneration and doing a new venture by acquiring necessary skills in the computer field was another strategy. Community trusts a teacher who sacrificially does something for community development.

After beginning the project further development into new dimensions was envisaged through continuous financial support of only Ten Rupees per month from parents and continuous association with the project for the maintenance and teaching was also part of strategy.

A reasonable amount was placed in Sinking Funds every year in order to meet technological obsolescence and acquisition of new technology in future.

**Innovative Methods used for the Project:**

In the building up of the project, participation of the parents to bear a negligible cost per month as fees is one method used in this project. Continuous association of a teacher after learning new



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technologies for doing a new venture and nurturing it into its fullness in a government sector school like ours was another innovation.

In imparting training an entire new approach is innovated. When First Standard kids are introduced to computer their first key board practice is through a word building game which is very interesting. They learn while they play and the boredom caused by conventional methods is eliminated.

Innovation is enacted in the entire office management by developing required software indigenously. Complete office automation is implemented which has reduced considerable amount of job stress of teachers and improved timely delivery of all associated services.

Innovation is introduced in keeping the stakeholders in touch with the school even when they are away from school by providing an all informative Website indigenously developed for the school. Aspirants seeking admission can download an admission form from sitting anywhere in the world. They can communicate with the School authorities through email which is very cost effective and fast.

Indigenously developed programmes for learning management and automation of procedures are always preferred in this project in order to make it affordable and cost effective and save it from the huge service charges and maintenance contracts.

**Duration of the Project Initiation/Implementation:**

The Project was implemented on 31<sup>st</sup> August 1999 when the then General Manager of Central Railway Shri. K.B. Sankaran inaugurated it and the project has successfully completed Seven years of functioning without any breakdown or deficiency of the expected service. In the inception the project had only ten computers with an operating system of Windows 98 which has grown into a major I.T. training facility in a phased manner having two labs, modern software and hardware. The Multimedia Teaching Centre was commissioned in 2005 and inaugurated by Divisional Railway Manager Shri. R.S. Viridi. The third Lab is commissioned in July 2006 and inaugurated by Hon. General Manager of Central Railway Shri. V.K. Kaul.

**Outcome/Changes resulting from the Project:**

The primary outcome is successful achievement of competency in Information Technology by students. Over the past seven years thousands of students of this school has become thoroughly computer literate without loosing any significant fees for that.



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The second outcome is that all the students passed out from this school are enabled to find an Information Technology related job or equipped for further specialized training in the field of Information Technology.

The third outcome is that all our teachers (forty) became computer literate through this project and they became more competent by learning computers but at not extra cost for learning.

The fourth outcome is increased customer satisfaction that has made a telling impact in the strength of students. Prior to this project it was about seven hundred and now the school has almost thirteen hundred students and demand is increasing. Every year almost two hundred students have to wait for admissions in vain but there was no waiting list like that prior to this project. The project has out rightly changed the image of the school from mediocrity to competitiveness.

Fifth outcome is participation of parents that has resulted in the overall development of the school. Increased interest of stakeholders has improved transparency and accountability on the part of school administration.

Sixth outcome is increased role of Railway Administration in improving the school. Since the commencement of this project sanction for new streams like Arts & Science and pre-primary sections were granted by the administration in pursuit of the overall development of the school.

Seventh outcome is that this initiative has put the school on the National Educational Map of India as the National Award Winner of year 2005 for Excellence in Computer Literacy among all government schools in India.

Finally this project has played a major role in making Central Railway School Kalyan the Best School on Central Railway for the year 2005 and the proud winner of General Manager's Shield for the Best School.

This project has adopted a local vernacular medium Railway ATP school in the vicinity and imparts free computer training for more than one year with teamwork of our faculty and senior students. Thus our facility has become a channel in the improvement of another school in the community. The project is instrumental in the community development in its own way.

**Exceptional Achievements of the Project:**

The project concept, design, infrastructure development and maintenance are done by the award winner through a transparent system that is accountable to an apex body consisting of representatives from parents and administration. Students are given equal opportunity to learn



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and grow. Teamwork of teachers, parents and students have culminated into a success and simplified lengthy procedures of conventional systems bound to red-tapism. Time bound growth is visible over the seven years by growing from one lab of ten computers to three labs of fifty computers with multimedia teaching Lab.

Quality training subjected to verifiable objectivity is imparted through democratic functioning and partnership of government employee on one side and parents on the other side. The project has facilitated the Information & Communications Technology enabling and reduced the digital divide through enhanced citizen role and involvement.

The idea behind the project is unique and first of its kind in Indian public sector that has resulted in creating productive assets of lasting nature in the form of competent I.T. literate young students.

The development of software for training and office automation has reduced stress and improved efficiency at a negligible cost.

Finally this literacy initiative has been adjudged as the Best project from Maharashtra State and Best among all government schools in India quoting it as a model project. Cash Award of Rupees Nine Lakhs & Trophies was given for this by the Hon. President of India. The prize money is fully available for further project expansion and increased modern learning facilities.

This outstanding achievement has made the Mumbai Division of Central Railway, Central Railway and the Indian Railways proud by setting a quintessential example in the field of education and employee welfare activities. The messages and Testimonials of dignitaries of Railway Administration received in this regard to the school testify this.

The success of the Project has been appreciated by the Central Railway Administration by nominating the Project Coordinator to develop similar I.T. literacy initiatives in all other schools of Central Railway in a phased manner after assessing the need and scope of computer education for concerned schools.

**Role/Nature of involvement of the Project Coordinator:**

The project is the brain child of the Award winning Project Coordinator who came forward with an innovative idea for design, infrastructure building, financing, implementation and sustainable maintenance with participation of parents. He has motivated the parents to contribute a nominal



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amount for building up a dream-project that was approved by the Railway administration and appreciated by the Government of India.

He commissioned the project and made it a transparent organization delivering quality service. He spared sacrificially his personal time on an average of five to six hours daily over the past seven years after finishing his designated duties as a Post Graduate Teacher of Commerce for the successful functioning of this project.

He has shown outstanding capabilities of adaptation by learning new technologies and imparted the same to his colleagues and thousands of pupils resulting in community development through education.

He has helped his institution to save lakhs of rupees that may be otherwise spent as service charges for imparting such kind of services on massive scale. He has a multi-level involvement in the day to day management as the Project Coordinator, System Administrator and faculty.

His motivation has built up a team of students and teachers to adapt a local Marathi medium school to impart free computer training on spare time. He has elevated the project into a facility for imparting training for government recognised diploma in Information Technology that has benefited hundreds of young un-employed youth.

His involvement in the training of elderly members of the community at reasonable fees after the regular school hours has made hundreds of elderly people (most of them Railway employees) in the community computer literate. The revenue thus generated has augmented the project with more developmental facilities.

He has invented modern and learner friendly methods of teaching and learning that has created interest in the learners and made the teaching-learning process very lucid and user-friendly.

His involvement as the architect of this project has increased the reputation of the school and its image. He has made a state-of-the-art learning centre from scratches.

He keeps himself updated with the latest development in the field of education and goes on updating the project's facilities in order to keep it fit for use in the changing educational scenario.

**Sustainability of the Project:**



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The project has completed seven years of successful functioning. It is systematically designed and all possible provisions are made for modernization and expansion from time to time.

The revenue required to maintain the project is sufficiently generated by the fees paid by the students. There are additional courses for generating more revenue and advanced training for students.

Secondary leadership is genuinely thought of and younger faculty members are motivated and trained to take up responsibilities in future thus the system is not dependent on any single individual for its survival.

Financial planning is adequately done from the fees generated in the past and sufficient funds are invested in a nationalized bank intending to embrace any change emerging from new technologies. The recently received Award money of Rupees Nine Lakhs from Government of India plus already created sinking funds are sufficient to take care of further developments of this project.

The project is adequately equipped so that at any given moment of time if the School Management wants, it can utilize the idle capacity for any employment generation programmes that may generate a lot of wealth especially in today's upcoming opportunities in the field of BPO business.

The centre is fully networked, connections of Broad-band, own web-site modern hardware and latest software are all available here with a team of highly motivated and committed group of staff.

Investment in education never go waste it pays rich dividends hence the stakeholders will always be ready to subscribe the quality services given here and there will be no dearth of demand for our services.

This project can be subjected to any quality audit at any given time and it can easily get certified for ISO or any equal standard in the service industry. The project is based on the democratic pattern of management with adequate representation of all concerned. The Parent-Teachers Association has now been registered as a public charitable Trust in order to manage this venture with public accountability and to continuously sponsor the ensuing developments.

The project was commissioned with a vision to make every member of the school family a contributing member to achieve the mission of this initiative. The mission of this venture is to



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make every student of the school competent to face the challenges in education emerging due to the impact of Information Technology. The project sustained all these years complying with this vision and mission.

A plan to connect all classrooms of the school with ICT enabled devices facilitating animated teaching is under gestation. We look forward to a day when faculty go to smart classrooms connected with high band width to teach on interactive displays that makes the teaching-learning process more creative and interesting. This will change the entire paradigm of teaching learning process.

We are planning to open a Study Centre affiliated with YCMOU to impart Government recognised Certificate and Diploma courses in Information Technology at very affordable fees.

It is left for the Railway Administration now to decide in what all great possible ways this modern learning facility can be utilized for community development and further capacity building and generation of wealth that may augment employee welfare measures for which Indian Railway is reputed for.

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