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Modern Practices In Kerala Education

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Abstract

Kerala model is a famous development model. Education was one important component of this model. Kerala government gave importance to education in its policies and achieved remarkable progress. Now its policies are concentrated on improving technology and e content in the educational sector. It has institutional structures such as SIET. CDIT, IT@School. There are recent projects and initiatives which are meant to stimulate this progress such as General Education Protection Mission, Hi-Tech Programme and Samagra portal. It has made positive impacts in the educational sector of Kerala.

Introduction

Education is important in the development of an individual as well as for the development of society. There is comparative increase on the awareness of the importance of education. In the present context there is hike in general literacy rates as the result of various initiatives made by various state governments and central government in India. Now there is a shift in approach along with the traditional consideration of quantity of education. Today emphasis is given on quality of education, how the knowledge is imparted. It is in these premises the role of technology in education emerges. Kerala was declared as first digital state in the country by the honourable President of India on February 2018. The educational policies as well as governmental decisions in Kerala may be analysed on these background. In recent years more and more programmes which focuses on technological development in the educational sector is emerging and budget allocations for the same is also increasing.

"Kerala Model", the renowned development model of sustainable development has attached importance to education. From the basic infrastructure already laid during the colonial times education has improved as the result of policies followed by the state governments during the post independence period. It was the government's role rather than private participants that was ensured in these policies. Government became the provider and facilitator of education through large chain of government

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provided additional facilities such as noon meal. It must be remembered that Kerala is the first state to start noon meal programme in India. These factors along with the central policies such as New Education Policy (1986), Sarva Siksha Abhiyan(SSA) and Right to Education Act etc improved the literacy in Kerala. The following table of official data underlines this fact.

Year	Person	Male	Female
1951	47.18	58.35	36.43
1961	55.08	64.89	45.56
1971	69.75	77.13	62.53
1981	78.85	84.56	73.36
1991	89.81	93.62	86.17
2001	90.86	94.24	87.72
2011	93.91	96.02	91.98

Table 1. Literacy Rate 1951-2011 **(Source: Government of Kerala)**

Educational Technology

Educational Technology is defined in two different modes. According to the first model it refers to the use of psychological and pedagogical principles in the teaching and learning environment. In the second model it refers to the use of modern technological appliances and apparatus in the process of teaching and learning. In the present context, the second model is used to analyse. Kerala government as said above to an extent has laid basic infrastructure facilities and capabilities in the educational sector. Now it is moving another stage called as the educational technology. Here the importance is given to modernising the classroom climate and teaching – learning conditions. Now a days the policies formulated by the state government concentrates mostly on the development and propagation of e-content as well as transforming the whole academic process through the careful inclusion of technology. From the process of admission to the process of issue of certificates at the end, there is presence of modern state controlled technological capability which to an extent has given momentum to the development

of educational sector. Here effort is made to understand and evaluate new technological initiatives in the educational sector of Kerala.

SIET

This is an autonomous institution working in the field of Kerala education for the development of technology in the educational sector. It is one of the seven SIET's in the country. It started functioning in 1999 after it got sanction from Department of education, , Ministry of Human Resource, Government of India in 1998. The administration is carried out by an executive committee with the Educational Minister as its Chairman. The general Education Secretary is the vice chairman. Committee has 16 members in all. There is a full time director for the day to day administration. SIET aims at improving the class environment through the use of technology. SIET develops the digital content such as software, audio, video for educational purpose. It also provides training for teachers to make the capable of managing digital content. As per the official estimates it has developed about 5000 educational videos and animation, a pool of about 140 teachers who have adequate competence regarding technology through proper training. Now SIET Kerala provides online courses and also supports about one lakh teachers to improve their skills (SIET-Kerala).

C-DIT

Centre for Development of Imaging Technology (C-DIT) under Electronics and Information Technology, Government of Kerala was established in 1988. At the beginnings it was mainly focused on research and development in the field of film and electronics technology and also in area of science and improvement in communication using video. Now the C-DIT has diversified components in Information Technology applications including software development and to providing IT enabled services. The C-DIT is important tools in the administrative apparatus of state such the grievance redressel, issuing of ration cards, Malayalam language computing, Multimedia Learning Objects for ICT enabled education, software development etc. Now it has grown to become an approved research centre of Department of Science and Industrial Research (DSIR) and Kerala University (C-DIT).

IT@School Project

To execute IT enabled education in Kerala IT@School project was set up in 2002 under the auspicious of General Education department of Kerala. It has made many changes in the educational sector as one of the first programme to have direct relation between education and information technology. Some of the initiatives include:- To promote online and in-depth

learning for students, Digital Collaborative Text Books (DCTs) was implemented. To make development in the field of ICt various training programmes was conducted for students and teachers. In the field of E-Governance various scholarships, results of board exams and single window admission to higher secondary etc were initiated. Now the IT@School focus more on the development and use of various free and open source software. The project promotes use of Open Source Software from the beginning through GNU LINUX in 2004 and adopted a new version called IT@School GNU/Linux (Krishnaswamy 2012). Now they had arrived at using UBUNTU, the latest version as platform.

A related project with the IT@School is the VICTERS(Virtual Class Technology on Edusat for Rural Schools) a complete education channel launched using the potential of EDUSAT. The channel begun to function on 28th July, 2005. From 2009 it was available on all local cable networks. In 2014 another up gradation was made and the transmission was changed from analogue to digital. The channel also has facility for live streaming at web. It provides the propagation of high quality education to the students and teachers from the authentic and original source (Victers).

Sampoorna

It is a school management software implemented by IT@School in use from 2011 which covers from the admission to the issue of Secondary School Level Leaving Certificate(SSLC). It uses free and open source software Fedena. It is available both in online as well as offline mode. When there is instances of fake students in admission register to have the benefits widely found among aided schools of Kerala, the provision for UID number entry was adopted. It helped in easy monitoring and identification of student in the state and there by mal practices to an extent was reduced.

The above discussed structural components acted as a base for the ICT development in the field of education of the state. But there is more recent initiatives and policies that can be found in the educational sector related to advancement and application of technology.

General Education Protection Mission

In order to promote the education in government and aided institutions and to enhance facilities in them the government of Kerala formulated a new policy called the General education protection Mission. Through this mission government tries to make 1000 government schools to international standard. It implies that transformation is not focused on surroundings and

infrastructure. But also to reform teaching and learning process by introducing ICT enabled teaching and learning process, a child centred learning process (The Hindu 2017). In the process of reformation it makes use of the assistance of Parent and Teachers Association (PTA), Alumni, local self governing institutions etc. Initiatives will be made to have effective changes in the curriculum also.

Hi-Tech school programme

The Hi-Tech school programme is part of General Education Protection Mission. **Kerala Infrastructure and Technology for Education (**KITE) is implementing agency for this programme. It is actually the revised form of IT@School Project and first SPV (Special Purpose Vehicle) Company of the Education Department of the State. It is funded by Kerala Infrastructure And Investment Fund Board (KIIFB), which monitors and allocate funds for various projects designed by government of Kerala. The detailed project of Hi-Tech school programme which covers around 4775 schools and estimates about 493.50 crore rupees was approved. According to this project each classroom will be transformed into a smart class room. The classroom will be equipped with Whiteboard and Sound system, Laptop, and Multimedia projector. There will be a Hi-tech Computer Lab in each of this school and will have Desktop Computers with UPS, LCD TV, Multifunction Printers, and a HD Camera. Network in the central server of Lab will connect the classroom and Lab to provide the transfer of information. A high speed internet connection is also ensured in each class. High speed broad band internet is assured in all the schools up to higher secondary level.

As part of the project, capacity building programmes has been conducted in various topics such as Cyber Safety, Development of Mobile Apps, Programming, Animation, Electronics, Hardware, Malayalam Computing, Robotics, E-Commerce, E-Governance, Video Documentation, Web TV, etc. for teachers and students for the effective implementation. As per the government report there are 77194 teachers and 52150 students as KITE club members.

SAMAGRA

The portal is developed by KITE. It is a repository of educational content which include audio, video, images, tutorials, textbooks and question banks etc which suits the curriculum and syllabus. It has the resources in four mediums of instruction- Malayalam, English, Tamil and Kannada. There is also provision for uploading contents for those who have adequate resources with them. The teacher does not need to surf the internet for resources which suits the topic. All the resources are available at one place.

Positive Impacts

While analysing the above programmes and policies there are positive impacts in the field of education of Kerala.

• Due to these policies there is a change in notion in the society towards the public schools of Kerala. As a result there is significant increase in the enrolment of students in the government schools. There is 40,000 students as additional enrolment in public schools which is first in 25 years (*India Today 2018)*.

• Another positive impact of the policies is that there is substantive reduction in dropout rate in schools of Kerala. As compared to other state it has lowest dropout rate in India (*The Hindu*. 2013).

• There is significant change in the attitude among students towards the learning activity. Using of ICT helped them to be more attentive in the class and arising interest in classroom activity.

• Enhanced the skill of students in dealing with the new technology has made them self sufficient to face the challenges in their higher studies and future life.

• A large number of teachers who got training through the various programmes mentioned above helped in the development of e-content without much additional costs.

• Initiatives like Sampoorna and various scholarship portal of IT@School helped in the better administration and avoid leakags.

Limitations Of Programmes And Recommendations For Effective Functioning

The policies and programmes formulated has achieved remarkable progress in the educational sector of Kerala. But there are also certain drawbacks for these programmes

• Though IT education and use of ICT enabled components is widely propagated, until this day there is not a provision for appointment of permanent computer teacher or a full time personal capable of dealing with the ICT. This hampers the active use of ICT in schools. In the higher secondary schools there are teachers for computer science as it exists as a different subject combination or discipline.

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secondary schools there are teachers for computer science as it exists as a different subject combination or discipline.

• Though training is given to teachers, there is a large number of teachers who still practice traditional methods of teaching. They are not confident to use the ICT enabled components. All the teachers must be using the components in their particular subjects. It must be checked by competent authority in frequent time through practical sessions for teachers and evaluating their performance.

• vSome of the schools still lack adequate infrastructure facilities. Though equipped with ICT related components, the schools may not able to operate it. For example while lacking sufficient supply of electricity and high speed broadband internet, they activities may remain halted.

• The inclusion of ICT enabled components require adequate time. The busy academic schedule and curriculum makes it difficult to spend time for more resources in the subject through ICT. Restructuring of curriculum and syllabus on this premises is required.

• Maintenance of the equipments is also a problem. The equipments may be not in a working condition and its timely repair is needed. Due to government supply of these products through specified companies such as Keltron, the institution has wait until the officials of company arrive and resolve the problem. This must be solved through functioning of regional service centres at district level able to deal with it it minimum time.

• Up to the class of 10th, teaching of ICT is practiced and promoted. In the higher secondary level it is neglected and only limited to the optional or particular discipline. It must be extended to all disciplines in tune with application in the respective subject.

• Though there is substantive reduction in dropout rate among students of Kerala, the rate in tribal region is alarming. It must be checked.

Conclusion

The world is witnessing rapid transformation as result of the developments in information and communication technology. None of us can escape from this reality. The students who are moving forward have to deal with this world must be adequately equipped with rapport of ICT. Hence the incorporation of technology to education is important. The Kerala government to an extent through its policies is making this process. Capacity building is an essential component of all these policies. A child cantered approach is reflected in all these policies. Education in the

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modern context without application of information technology is a futile attempt. Education with technology can transform the world. The innovative policies and programmes in this instance is model for other states also.

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C-DIT Kerala at http://www.cdit.org/about-us

Victers at https://victers.itschool.gov.in/

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