

LOCAL CONTENT DEVELOPMENT PROGRAMME

Experiences of Three Schools in Karnataka

November 2005

SUMMARY

Introduction

This is the consolidated report of a small study conducted in three schools in Karnataka, where the Local Content Programme has been launched, to gain insights to aide in expanding it to more schools. Local Content Development is envisaged as an important initiative to unleash and unfold creativity, nurture curiosity and give a boost to self-imagination of children. This will be in the form of computer based video presentation by children.

Objectives of the programme

The aims of the programme in brief are:

- * Providing children the joy of creation;
- * A platform for expression; and
- * An opportunity to interact with the world around.
- * Nurture creativity among the children

Methodology for the programme

The design of the effort envisages group work being used for the project. 5th, 6th and 7th std. students of schools that have completed one year of CAL successfully will be made into groups in each school and each group will identify a topic of interest and collect the relevant information by interacting with the world around them. The teacher, who will act as the facilitator of the task, will give them all assistance. The students can also have a 'mentor' for each local content development project in the habitat. Learning committees have been planned in school with the idea of involving the village people in the endeavour. The Young India Fellow (YIF) wherever available would also be involved in assisting the teams.

The students will first design the format, collect the needed information and then prepare the text and type textual information in the computer using the local language editor (Baraha, Nudi, Sri Lipi, etc). They would draw pictures where needed using the MS-Paint application and capture relevant photographs using the web cameras from the nature around. and give their own voice over for the text typed. All this will be presented using a power point application.

A platform will also be provided to these students to exhibit their creations at block / district / state level competitions. All the projects will be collected and made into a 'compendium' and will be circulated among all the CAL schools for reference and learning.

The key steps to be followed in the projects were:

- ✓ Identification of the topic
The freedom of selecting the topic is given to the students as it creates a sense of ownership and a conscious concern in them to complete the project.
- ✓ Actionables for reality check
Once the students select the topic, the teacher, mentor, parents and the students group will sit together to draw up an action plan; group members will distribute work among themselves and assume responsibility for completing it.

- ✓ Gathering of information
The task is distributed to a sub-group and the teacher will guide the students by giving leads / sources and identify the mentor / resource person.
- ✓ Consolidation
Keying of collected information into the computer, shooting of photographs by the web camera, recording of the narration using mike, all tasks done by a subgroup, will be consolidated / synchronised to create the final Local Content under the guidance of the teacher.
- ✓ Sharing the findings
Once the Local Content is ready a strategy should be developed by the teacher in consultation with the student group, mentor, community to disseminate it to the host / nearby schools and community by conducting melas, exhibition, etc

The interest of the children, which generates the energy level in them, greatly depends on:

- Selection of Topic
- Access to additional information or source of information
- The mentor / guide available to nudge them forward when they get bogged down

This results in

1. Enhancing children's observation by being more receptive
2. Building their memory by learning to compare and contrast instead of repetitive practice
3. Improving their ability to judge by comparing their judgment with their peers and their judgment over the period
4. Enhancing their imagination by seeing what can be done by forming mental images, power to create thought, imitations, images or new combinations, before selecting an option

The program also enhances the computer skills of the students, builds team spirit, instills work culture and develop connections with the community in which they live.

The schools for the programme would be identified based on the following:

- The current CAL program should be functioning effectively
- The school should have computers
- There should be a teacher willing to lead this initiative
- The school should provide identified time in Computer Center for children to work on Local Content Development projects

This study report is confined to experiences in three selected schools in Karnataka:

- GLPS, Agara, Bangalore rural district
- GLPS, Somanahalli, Maddur taluk, Mandya district
- GLPS, Velagalaburre, Kolar district

Methodology for the report

Information for this report was collected through interviews and group discussions. The Head teacher was interviewed separately while group discussions were conducted with the children from class 5, 6 and class 7 and with members of the Learning committee, where available. These discussions were based on the framework of questions prepared in consultation with the research team prior to the visit. The final presentation content was also viewed.

The idea was to find out the extent to which the 'Learning Committee' assisted the children in their Project and what they felt about the Programme. Similarly the Children and the Head teacher were asked to talk about their experiences and perceptions of this Programme.

Findings

The way the programme unfolded in the three schools was some what varied. On some aspects, there were similarities, though.

Common observations on the programme across the three schools were:

1. The children who participated in the projects in all the three schools enjoyed the process immensely
2. They picked up / got exposed to several new skills like
 - taking photographs using web camera
 - working in groups and sharing the work load
 - discussing about the topic and the content
 - keying in / data entry in Kannada software
 - preparation of power point slides
 - giving voice over for the slides
 - presenting the project

On many of the softer aspects however, there were differences between the schools. The programme seems to have been implemented somewhat better in Agara GHP schools as compared to the other two schools where the programme left a lot to be desired.

In the Agara school, the Head Teacher and the other teachers seemed to have understood the broad philosophy behind the programme. They consequently gave a lot more freedom to the children than in the other two schools. The selection of the topics themselves was a lot more involved exercise here and the children participated in it well. The final topics selected says it all – Waterfall, Victory stone and Village tree. Further, in this school, the teachers even encouraged children in lower classes (class 3 and 4) to participate admittedly with more assistance. The community showed more involvement in this village.

In the other two schools, the teacher / YIF seemed to have played a dominating role. The children seemed to have less of freedom. The topics selected were the same old ideas straight from the text books – Transport, Soil, Plants and Water. This is perhaps more a reflection of the teachers inability to think and guide the children than anything else. This resulted in one of the objectives of the programme – looking beyond the curricular material to encourage creativity not truly being met. Participation and involvement of the learning committee has been sporadic.

In the schools, since the project was restricted to a few students, the tendency was to identify the brighter lot for the group. While this may be acceptable to start with, the process has to truly encompass all the children as it moves ahead. Also, one-two students in the groups seem to dominate the others. While this is part of the learning for the children, perhaps the teachers concerned should be sensitive to the need to involve other children from the group also more actively.

Presence of only one web camera seems to have been a bit of a limitation. This would need to be addressed in the subsequent schools. Also, perhaps a lot more time will need to be spent with the teachers in the schools to get them to understand the real purpose of the project and how to facilitate the children without necessarily doing their work if all the objectives of the programme are to be achieved.

The Local content Programme by itself is an excellent idea and has been welcomed by all the stake holders. The children in particular in all schools have been extremely enthused by their effort and seem to have learnt a lot in terms of several hard and soft skills. The experience at Agara school has been a lot more positive and the programme has been executed better there. However, to make the programme uniformly successful in all schools, perhaps some modifications would need to be considered in the initial training and orientation efforts. The teachers and the learning committee would need more hand holding and guidance to help them facilitate the efforts of the children without actually dominating them and stifling their curiosity and creativity.

1 INTRODUCTION

1.1 Background

Computer Aided Learning Programme (CALP) of the Azim Premji Foundation has been developed with the aim to make 'learning fun, assessment play and equal knowledge for all'. Under the programme, as the name and aim of the programme suggests, the computer is used as a vehicle to encourage the child to attend the school regularly and learn in an enjoyable way. Under this, the Foundation provides CD based content and training to the school teachers. The CD are developed from the curricular content for children in primary schools to address specific 'hard spots' identified. The school teachers are provided training to handle the CDs as also to integrate the content in the class room teaching. The computers and the other related hardware is provided by the state governments.

Now in its third year, the CALP is under implementation in several states. In any state, the contribution of the Foundation is the same – providing the CD content and the training. The logistics of the deployment of the computers in the Computer Aided Learning Centres (CALC) takes slightly different routes in different regions. The principle among these include:

- The on-school model where the computers are installed in the premises of the school and children from that school use the facilities
- The off-school model where the computers are housed at a location some distance from the school in another larger school or at a public facility where it can be utilised by other sections of the community as well
- The 1000 school model where the task of providing computers, installing them, day-to-day running and maintaining them is handed over to some private organisations

With a view to further enhance the benefits of the CALP, the Foundation has devised Local Content Development Programme. This has its origin in a pilot project started in 2003 in four schools in Bangalore with CALCs which were performing well. These schools were given a web camera by the Foundation and the children were asked to create content by using the available resources around them. An interested volunteer teacher and the Young India Fellow (a local youth with minimum computer skills and a minimum of pre-university qualifications who provides support to the CALC) were briefed on the local content design concept and asked to guide the students. A local coordinator was identified for implementing this project. This pilot project generated an enthusiastic response and the Foundation decided to expand it to other schools.

1.2 Pedagogic Rationale for Content Development Programme

A child learns both in the school and outside. While the child learns a lot from nature and domestic environment spontaneously, in the school she is taught with a specific objective in mind. Building on the skills and traits acquired outside the school by the child can be utilized by the teachers to accelerate the process of learning. Effectiveness of primary education is dependent on how effectively the learning in the school is related to the situations at home / surrounding. This linkage would attract the child to the school and complete the learning process.

The understanding of every child will vary primarily due to the exposure that a child has which is determined by the economic situation at home, the character of his / her habitation and the ability to connect to what the teacher does in classroom.

The Local Content Development programme seeks to harness the features of:

a) Multiple Intelligence (concept by Howard Gardner)

The programme provides the child an opportunity to learn using all the different facets of intelligence. Local content designed by the children will provide an outlet for Spatial, Verbal, Kinesthetic (handle objects skillfully), interpersonal, intrapersonal and naturalistic intelligence of child.

b) Direct Teaching strategy

The local content development process is a direct learning for the child who participates and presents it to his / her peers and community.

c) Discovery learning concept advocated by Jerome Bruner

Local content development process addresses all the activities prescribed in Discovery Learning such as observing, measuring, inferring, predicting and classifying.

d) Activity Based Learning

The local content process being an activity, the children have freedom to choose the topics / concepts of their choice and get more information.

Local Content Development Programme is envisaged as an important initiative to unleash and unfold creativity, nurture curiosity and give a boost to imagination of children. This will be in the form of computer based video presentation by children. The programme is aimed at the schools, where the CAL programme is operational for more than one year.

1.3 The objectives of the programme

The programme is aimed at achieving the following:

- provide children the joy of creation;
- provide them a platform for expression and
- give the children an opportunity to interact with the world around them

1.4 Expected Outcome of the Programme:

The outcomes expected from the programme are

- The programme would build literary and communication skills among the children
- The programme would be exciting for the child and give him/her ownership of the work
- The long term goal of the programme is to assist the students to develop abilities to learn for themselves
- The program could document local practices and culture for posterity
- Local content schools could participate in competitions conducted by various organizations
- School / District / State will exhibit the best available talent in their students
- Child Developed content would provide an inspiration for other children

This document provides the details of the experiences gained during the local content development efforts at three schools near Bangalore.

2 Local Content Development Programme – Velagalaburre

2.1 Background

Velagalaburre Government Higher Primary school (GHPS), 18 Km from Kolar, is a pilot project school for the content development programme. The school has total strength of 299 (156 boys and 143 girls) students with 8 teachers. CAL programme was launched in this school in 2003. The CAL facility with 4 systems is available within the school premises. YIF is provided to take care of CAL in the school. For content development this school was given a web camera by the foundation and the children were asked to create local content by using the available resources around them. The teacher and the YIF were briefed on the concept and were asked to help the children. The community members were explained how it would be useful, how to collect the information, what name should be given to the programme, how to group the children etc. On the same day a committee was formed for this purpose consisting of 19 members and they finalized the name “Minugu–Belagu” for the group.

The following report is based on the interactions with the children who developed the content, viewing the presentation made by them; interaction with community members, members of the committee and the Young India Fellow.

2.2 Program design

Children from 5th 6th and 7th class of the school who had completed one year of CAL successfully were selected for the project by the teachers/YIF. Each class had around 40 and 60 students of both sexes – class 5 had 39, class 6 had 55 while class 7 had 59 children. About 14-15 children active in the school were selected for the project from each class.

Identification of the topic

The freedom of selecting the topic was given to the students as it creates a sense of ownership and a conscious concern in them to complete the project. Accordingly, the students of 5th class identified the project topic “Sarige” (Transport), 6th class decided on “Sasya” (Plants) and 7th class finalised “Neeru” (water)

Action Plan

After the selection of the topic the committee prepared an action plan and distributed the tasks/work to the children's groups. The committee members also took up the responsibility of weekly monitoring and review for completing it. The teacher guided the students by giving leads and sources. The information for the project was gathered from the books as the topics selected were more academic. The students with the help of teacher and YIF, designed the format, collected the needed information and pictures and drew the visuals wherever the pictures were not available. The teacher guided the children in consolidation of the information collected by them and the YIF facilitated the children in keying in of information collected into the computer.

2.3 The Process

The committee met every week on Saturdays for 2 hours to review the progress. The committee members especially - Ashwini and Rashmi (two former students of the school now working as volunteers after the school hours) spent time with the children facilitating them to select the topics, to help the children take the photographs, compiling and consolidating the information collected by the children, etc. They helped the children to write down the topics on which they would like to make the project, then discuss the feasibility of the topics, finalize the topics and accompany the children for taking the photographs.

The students first collected the needed information, drawings and pictures. Thereafter, the committee member facilitated the compilation/consolidation and the YIF helped them to type / key in the textual information in the computer using the language editor Baraha and power point application, and provide their voice over. The children, committee members and YIF were involved in the project for about one month.

2.4 Roles & Responsibilities

The different stake holders in the project had varying roles.

Role of Learning Committee

The 'Learning Committee' concept is one of the implementing methods of local content development programme. In this school, learning committee was formed consisting of 19 members - educated unemployed youth, housewives, parents and ex-students. However, only 12 members were active through out the project. In the first meeting, they selected a name for the learning committee "Sugandha Balaga" (Fragrant Group) and named the project "Minugu Belagu". (Flashing Light).

The committee was involved in the preparation of action plan after the selection of the topic and took on the role of monitoring the progress of the project, reviewing it weekly till the completion of the project.

Role of children

The children from the classes 5th, 6th and 7th (formed into three groups) identified a topic of interest and collected the relevant information by interacting with the family members, elders in the village, looking into the books of high schools for pictures and information.

- Children roamed around the village with camera to interview / click the camera for pictures of their selected topic. There was a lot of excitement as the children's team ventured out armed with camera.
- They talked to community people like farmers, parents, teachers, etc.
- They collected the pictures and drawings for the project.
- They gave their own voice over
- They keyed in the content with help of the YIF.
- The children presented their projects on 15th August in Independence Day function to the parents and community who applauded their work.

Role of Teacher/YIF

- The teacher and the YIF were given the role of facilitator for the chosen task in Learning Committee meeting. The information collected by the children was finalized by the teacher and the YIF helped them type the collected information in the computer using the local language editor; draw relevant pictures using the Paint-Brush application; YIF helped them to enter the data in the power point presentation.
- They helped children by guiding them to capture relevant pictures using the web cameras from their surroundings;
- They helped the children in composing their own voice over for the text typed.
- The YIF Assisted the children in developing the presentation through power point application.

2.5 Outcome

The outcome was almost like a documentary film on 3 topics - with songs and titles of the children involved, etc. The children facilitated by the teacher and the community selected the projects. The 5th class students developed the project on Transport, 6th class on Plant and 7th class on Water. All the topics are related to class curriculum and are within the academic setting. The children shared/presented the projects developed by them on 15th August to the community. A brief summary of the projects is presented below.

Sarige (Transport)

A group of 13 children from class 5 named "Skandha" developed this project Transport. The topic was selected by the students themselves. After selecting the topic the children collected information on transport and pictures on transport. The same was consolidated by the teacher and the YIF helped them in preparation of slides. The project consists of 9 slides.

In the first slide they explained the meaning of transport – carrier of goods and people from one place to another. The other slides present the importance of transport – that it creates employment opportunities. During the war food and ammunition is transported to reach the soldiers. It helps in communicating between the nations, etc. The project also has slides on the types of transport – by road, by water and by air. The pictures collected by the children are placed in the slides. The children collected pictures on car and steamer that could not be found in their village from newspapers, old books and magazines and high school books. The children gave the voiceover to the text and a song composed by the 5th class student was used as the title song. The slides are animated and have music in the back ground of the slides.

Sasya (Plants)

A group of 14 students from 6th class named as "Sphurthi" worked on this project on "plants". The topic was selected by the children under the guidance of the teacher, YIF and the monitoring committee members. The project has a total of 12 slides. These include importance of plants in the environment, parts of plants, functions of different parts of the plants, uses of plants etc.

The voice-over was given by the students to the text and the poem was composed by the same 5th class student that was used as background song. The YIF and the teacher facilitated the project. For the picture of roots, the children collected the roots, stuck it to the walls and took the pictures. For the parts of the flower, they drew the picture on a chart paper and then took the photograph of the chart to insert it into the slides.

Neeru (Water)

The 7th class students developed the project on water. The group of 14 students named "Sparsha" selected the topic and their group name themselves. Facilitated by the YIF, the children prepared 17 slides on the topic. The slides are prepared on – water as important natural resource without which there is no life; sources of water – lakes, wells, and rivers; natural and artificial sources of water; uses of water, water cycle – a pictorial presentation of how water gets heated up by sun's rays, evaporation takes place, condensation of clouds, rain, and feeds river and ocean. There are slides on causes for water pollution, steps to prevent water pollution, reasons for shortage of drinking water, and how to save water.

One of the important aspect of this project is that the students have keyed in some of the information in English as well.

During the collection of data when the children went around the village to capture pictures on wastage of water, they also educated the villagers not to waste water. For example, in one of the houses for washing the clothes, the lady had opened the tap and went inside the house to attend to other works while the water was overflowing. The children told the lady not waste water like that. In another incident, in the village a water pipe was broken. The children took notice of this and informed the villagers and stopped the leakage. This way they have educated the villagers on shortage of water and its proper utilization.

2.6 Learning from the project as expressed by the children & the teacher

The learning achieved by the children as communicated by them included

- Presented opportunity for self learning, group learning;
- Enhanced the competitive spirit;
- Improved the children's communication skills;
- The children became more confident.

Some of the key observations / findings based on the discussions with teachers and children are as follows:

- There was a lot of excitement among the children and the community.
- Children asked questions, talked to their parents, relatives, family members and the village people on their topic.
- They collected the information, pictures and drawings, etc.
- Children composed songs on the project theme and sang in the project;
- YIF was involved actively
- Group project concept was used - work was shared by group members.
- The project provided an opportunity to the children to interact with the world around.
- It created a sense of ownership among the children.
- It has enhanced their technical skills like using the webcam, software applications like paint brush, typing in Baraha, Power point presentation, etc.

2.7 Conclusions:

- Interest among children to participate in the Local Content Development Program was remarkable. However, the content created by the children in all the 3 projects was more academic than local.
- The program also enhanced the computer skills of the students, builds team spirit, instill work culture and develop connections with the community in which they live.
- Though the local content development programme was aimed at promoting creativity in the children and to contribute to both their scholastic and co-scholastic learning, the extensive impact is seen in children acquiring soft skills like observation, written and verbal communication, planning and coordinating, etc; and technical skills like using webcam, and other computer application packages.
- If the motivated teachers and committed members are associated with the project, Local Content Development programme may contribute to the all round development of the child by building his/her cognitive, psychomotor and effective domain skills while simultaneously preparing the child for its adult life ahead.

3 Local Content Development Programme – Agara

3.1 Background

The GHPS at Agara about 25 Kms from Bangalore has a strength of 125 children and is staffed with 3 teachers. The CALC was started here in the year 2003 with 5 computers. All the children in the school with the help of an assistant teacher and community members worked on various projects related to Local topics and presented the same to the community on the Independence Day celebrations held at the school on the 15th of August 2005.

Information about how the school executed the Local Content Project was collected through interviews and group discussions. The Head teacher Mr Gopal (a 'best teacher' national award winner) and the assistant teacher Mr Kantharaj (an enthusiastic teacher) involved in the project were interviewed separately while group discussions were conducted with children and with 5 members of the Learning committee separately.

3.2 Program design

The school authorities decided to give every student in the school from class 3 onwards an opportunity to participate in the novel project. It was based on the school philosophy that no child in their school to be deprived and the low strength of the school was useful. Thus all the students from class 3 to class 7 were involved. In class 3 there were 19 children – 9 boys and 10 girls; in class 4 there were 16 children – 10 boys and 6 girls; in class 5 there were 13 children – 10 boys and 3 girls; in class 6 there were 10 children – 2 boys and 8 girls and in class 7 there were 15 children – 7 boys and 8 girls. The assistant teacher, Mr.Kanthraj, who was oriented, by the Foundation on the project along with a committee specially formed, called 'The Learning Committee', was to assist the children in doing their project.

Identification of the topic

The 3rd, 4th, 5th, 6th and 7th class children of this school chose five different topics. The following were the Projects undertaken by the students of the three classes:

- Class 3: Meke mari (Goat calves)
- Class 4: Agara kere (Agara Lake)
- Class 5: Jalapatha (Waterfall)
- Class 6: Veeragallu (Victory Stone)
- Class 7: Ashwathkatte / Arali marada katte (Platform at the village tree)

The above topics were chosen in two different ways for the upper and lower primary classes. For the topics chosen by classes 5, 6 & 7 there were deliberations and the children chose their final topic by choosing from a list of topics generated with the help of the assistant teacher. The assistant teacher himself decided on the topic for the children in classes 3 and 4 and encouraged them to make a presentation on the chosen topic by talking about it.

It is interesting to note how the class 6 children chose their topic as it displays the various ways in which a group can decide on a topic. At first they generated a list of topics with the help of the assistant teacher. Temple, Lake, Birds, Farmers and Coracle were the topics generated of which the 'Temple' was the chosen topic. However, when they heard about the topic chosen by class 7 and went to see the site (Village tree) they spotted something interesting of which they wanted to know more and what better way then to do a project on it and that is how they chose the 'Victory Stone' that lies close to the 'Village Tree'.

The Assistant teacher had a more direct role in Class 7 children identifying their topic –‘The village Tree’. When the teacher asked them to list topics they listed Sun, Our village, Our school, Ship and Our computer. The teacher felt that the content identified to do the project on were similar to those that are taken up for the trimester projects, hence he suggested the ‘Village Tree’, hearing which the children got excited and immediately agreed to work on that project

Action Plan

After the selection of the topic the assistant teacher told the children what was expected from the project and that all the information collected will have to be fed into the computer for which he along with the CALC assistant Mr Ravi (a replacement for the YIF) is going to help them. He also sounded some of the members of the Learning committee about the topics that the children are working on for the Project and that they will have to assist them in the collection of information. The deadline of August 15th was set for all the Projects.

Gathering of information

The teacher guided the students by giving leads and possible sources. The information for the project was gathered from the members of the community. Though the children did try looking for some of the information in the books available in the school library, they were unsuccessful due to the localized nature of their topics.

Consolidation of the information gathered

Mr. Kanthraj, the assistant teacher, guided the children in consolidating the information collected by them and along with the CALC assistant also facilitated the children in keying of the collected information into the computer and preparing the Power-point Presentations.

3.3 The Process

After each class identified the topics they were going to do the project on, the process of taking the required photograph, speaking to the community members to gather information and creating the ‘voice-over’ and the presentation on a power-point took place. The time for allotted for each project was two to three days after identifying the topics. On day 1 the children visited the site where the chosen topic could be photographed and spoke to the community members to gather the required information and on Day 2 the information was collated, a slide was prepared and the voice-over was created. For some classes it extended to three days.

The children in the lower primary classes provided only the voice over for their project and the assistant teacher did the rest, while the children in class 5, 6 & 7 took the photograph, collected the required information and even keyed it into the computer with a lot of assistance from the assistant teacher in the technical aspects such as creating the slide in the Power-point and the required voice-over.

The children identified five people from whom they received assistance to do the project. *Mr. Kanthraj*, the assistant teacher, helped them in identifying the topic while *Mr. Ravi*, the CALC assistant, helped them in feeding the matter into the computer and photocopying the required material while *Mr. Shivkumar* helped them to take photographs. Among the community members they specifically mentioned the co-operation of the Panchayat President, *Mr. Ramkrishna*, and the secretary, *Mr. Thopayya*

3.4 Roles & Responsibilities

Learning Committee

The school has 10 members in the learning committee of whom 8 are parents among whom 5 are SDMC members as well. The selection was on the basis of frequency of visits to the school. Those parents who used to come to the school regularly were met by the Head teacher and with a mutual discussion a committee was formed and the members christened it 'minugu thare'. Most of the members have a minimum qualification of class X. At the Head teacher's behest 5 members of this committee came for a short discussion to the school.

The committee members assisted the children in collecting the information, by providing the information they had on the topics, and becoming the conduits for accessing more information by interacting with other members of the community. One of the younger members Mr Shivakumar assisted children in taking appropriate photographs.

Role of Children

The children came up with a list of topics initially helped by the assistant teacher. Then they pruned the list and selected the topics keeping in mind that it does not clash with the topic chosen by the children of the other classes. The teacher played an important role in aiding their choice. Topic chosen by one class also helped another class to choose their topic as indicated earlier.

Though all the children in the class were involved in the project only a few children could get to do the 'important' things such as clicking the required photograph or typing the required matter and preparing the power point presentation and get a hands-on experience. For the rest it was the joy of being part of a project on a topic so local that no book could give them any information but they had to collect it first hand.

Role of Teachers and the CALC assistant

The assistant teacher, Mr. Kanthraj, was involved more than the rest of his colleagues. The teachers involved in the project were required to spend about an hour after school for the project purpose, while the children had to spend more time. They helped the children in composing their own voice over for the text typed.

The information collected by the children was finalized by the teacher and the helped them type the collected information in the computer using the local language editor; The CALC assistant helped them to enter the data in the power point presentation and develop the presentation through power point application.

3.5 Outcome

The result was 5 different projects from the children of 5 classes. All the projects were presented on power-point on a single slide which contained a photograph, a few lines on the topic written in the devanagiri script (Kannada) and also a voice over for the 5 projects using the voices of the children who participated in the respective projects. The projects were presented to the community on the Independence Day celebrations at the school that was held on the 15th of August, 2005.

The following is a brief on the Projects presented.

Meke marigalu (Goat calves)

19 children in class 3 did this project consisting of one slide with a picture of an old man carrying goat calves. The picture was taken impromptu by the assistant teacher when they were looking for a topic to do the project. The teacher then asked the children to talk about the man and the goat calves he was carrying. What the children said was typed in 5 sentences and a voice over was also created. The children spoke of the features of these calves and how the old man's kindness made them run towards him.

This was a project for class 3 but prepared by the assistant teacher. Though the mandate was to make children in classes 5 and above do the projects, the school felt that they should not feel left out. Similarly, the class 2 children were also made to do something similar to make them feel that they were also involved in something novel.

Namoor kere (Our Village Lake)

This was a project created similar to the class 3 project. However, the topic was chosen before hand and after the photograph was taken the 16 children in the class made their comments which were inserted into the single slide.

The size of the lake, its colour and the various ways in which the community members use this water was included in the slide.

Jalapatha (waterfall)

The class 5 children identified a place where the water was falling down from a meter's height and imaginatively titled it as 'water-fall'. Though 'water-fall' reminded one of the huge water falls of tourist attraction, it was interesting that the 13 children of class 5 could actually think of a 'water fall' when they spotted water dropping from a short height. The choosing of the topic itself displayed the children's capacity to think creatively.

The above photograph is accompanied by text explaining the meaning of 'Jala-patha' which is the title of the project. 'Jala' means water and 'patha' means falling from the top and the children have stated that it is a 'canal-waterfall'. They then explain that the excess water from the lake flows into this canal and the same water finally would reach the sea.

Though the project does not concentrate only on water-fall, but also about the uses of water and how it flows, it is the creative aspect of this project that catches attention.

Veeragallu (Victory stone)

The 10 children in class 6 did a project on the 'victory stone' found near the temple and the big village tree. In fact initially they had chosen the temple for their project, and they changed their topic when they went to see the 'village tree' that was chosen by the class 7 children. Near the village tree and also close to their chosen topic was the 'victory stone' which they found very interesting and wanting to know more about it decided to do the project. Hence, children not only learnt about a topic for doing the local content project, but also did the local content project to learn more about an interesting topic.

Using a photograph of the victory stone the class 6 children made a slide which explains its background and location. The image is sculpted in stone and is of a hero who lived in this village. They state that the hero used to protect the village using his bow and arrows and the image captures one such fight to protect the village.

Ashwath katte (The platform around the village tree)

The children in class 7 were suggested this topic by the teacher as they were not able to choose topics that were local and beyond their text books. However, as soon as the teacher suggested the topic all the 15 children in the class became very excited and were eager to do the project. They found out from the community members that this place has more than one name. It is popularly called the 'arali marada katte' named after the kind of tree. However, its official name is 'Aswath katte' named after a local deity called Aswath Narayana. The platform around the tree is used by the Panchayat members to deliver justice; thus it almost acts as the local court room. The people believe that a wrong judgment by the Panchayat members would be punished by the deity residing in the tree. The project also throws light on the tree's usefulness based on a scientific fact as opposed to the religious beliefs of the community members regarding the deity residing in the tree. The project concludes by the statement that no one cuts down this tree.

3.6 Learnings as expressed by the children and the teachers

The key learnings as per the respondents were as follows.

- Learning to type in Kannada using 'Baraha software' was considered as one of the important learnings children felt they had acquired along with getting knowledgeable about the topic chosen for the project.
- The learning for the children was different from the learnings in trimester project. Children felt that not taking photographs and not using the computer for the trimester project was the biggest difference compared to the Local content project. They also said that there was no extra information they gather (other than what they already know) while doing the trimester project unlike the local content project. And in the latter they also got to do the project by themselves- including the choosing of the topic for the project.
- What appeals to the Head teacher is that the content focus is not on any particular topic or subject but anything under the sun including an 'ordinary' coconut tree. Through these means, he believes, the children's interest to 'know' will develop.
- The learning committee members felt that the project is not only very novel but also highly informative, not only to the children but also for the elders. They said that having lived in the same village even they did not know so much of the local content presented by the children.

3.7 Observations/Findings

- There was a lot of excitement among the children and the community as it was a novel idea and they had never thought that interesting topics for projects would be available at the local level itself.
- Topics were selected by the assistant teacher's assistance as the students were not able to choose topics from beyond the curriculum.
- Children asked questions, talked to their parents, relatives, family members and the village people on their topic.
- Though only a few children got to do the exciting things such as taking photographs using the web-cam, the children worked in a group sharing the work.
- Children put in effort after the regular school hours and collected the information and took photographs.
- The project provided an opportunity to the children to interact with the immediate world around.

- It has enhanced their technical skills like using the webcam, software applications like paint brush, Baraha, Power point presentation, etc. The assistant teacher claims that after the project the children can type faster than him using 'baraha'.
- The assistant teacher who was given an orientation on the project was involved actively
- Role of Learning committee members was not clear to the children.
- The children are also in the process of developing individual projects as part of phase II of the Local Content Project.

3.8 Conclusions

- The 'Local Content Program' is a huge success in the Agara School and indicates that the potential is immense. If the Education Department supports the spirit of this programme it can unleash the power of creativity among children studying in Government schools and at the same time even develop the yearning for learning among these children.
- The belief of the Head teacher and his staff in going beyond the text to 'learn' is a 'non-negotiable' for the programme to succeed.
- The crucial aspect that came across is that even the parents recognize that children are learning something when they provide information about the surroundings through their presentations which many of the parents themselves are not aware of.

Hence, with the parents able to recognize the positives of such a programme and the children enjoying doing it the critical aspect is in the attitude of the Head teacher and the teachers – for which the officials in the Education Department require to believe in the philosophy that 'learning takes place even beyond the school'!

Some of the other feedback available was as follows.

- Though children have enjoyed the group project, they prefer to do individual projects as each one gets to actually do it by themselves.
- The Head teacher suggested that the project should be spoken of to the officials in their Department so that they are aware of it. If a DDPI or a Block Education Officer visits the school they should be able to ask the children about the local content and learn about the effort put in by the schools that are sincere and not consider that the school has got the children involved in something beyond the Department directives.
- The Learning committee members suggested that they should be given an orientation about the Local content Project. They are also keen to know what kind of projects have been done by children in other schools where the project is implemented.
- Some members of the 'Learning committee' have helped the children in gathering the information or in feeding it into the computer, however the children are not aware that the people who provided the information to them belonged to a group created especially to assist them in the project.
- After completing the group projects all the children had completed the individual projects as part of phase II of the Local Content Project. Though phase II was not covered under this study, it is important to note that the topics chosen were similar to the topics in the trimester and there is a possibility of overlap. 'Ship', 'Weight of air', 'Oxygen', 'Trees' and 'Animals' are some of the topics the children claimed to have done for their individual projects and unlike the topics in Local Content Project done class wise the topics in the individual projects were not 'local' in nature.

4 Local Content Development Programme – Somanahalli

4.1 Background

Somanahalli GHPS, 3 Km from Mandya, has total strength of 199 (95 boys and 104 girls) students including 17 children in class 5, 35 in class 6, and 56 children in class 7 with 9 teachers. CAL programme was launched in this school in 2000-2001. There is a separate room with 6 computer systems provided for CAL programme in the school premises. A YIF is provided to take care of CAL in the school. In July, 2005, the project coordinator from Azim Premji Foundation invited the community members for a discussion on Local Content Development Programme and explained to them the importance of the programme and the process that was to be followed in implementation of the programme. On the same day a Learning committee was also formed for this purpose. The following section is a case study on the Local Content developed by children from class 5th, 6th and 7th classes.

For the study, the data was collected from children who have developed the projects, from the YIF, who is the facilitator and the Learning Committee members who supported the project as envisaged under the programme.

4.2 Program design

Children in Somanahalli school worked on three projects for which three teams - one each from class 5, 6 and 7 who have completed one year of CAL - were formed.. The selection of children was done by the teachers/YIF from among those who were active participants in the class. Each team was formed with 10 to 12 students.

Identification of the topic

The freedom of selecting the topic was given to the students as it created a sense of ownership and a conscious concern in them to complete the project. Accordingly, the students of 5th class identified the project topic "Plant", 6th class "Transport" and 7th class "Soil".

Action Plan

After the selection of the topic the three teams along with the YIF prepared an action plan of various activities and distributed the tasks/work among them (children). Every day the children would spend one to two hours during the computer class and play periods and some times before and after the school working hours, to work on the project. All the three teams took one week to complete their respective projects. Some of the members from the Learning Committee were requested to help the children for various activities of the project.

Gathering of information

The YIF took the responsibility of guiding the students by giving leads and sources. The information for the project was gathered by the children from the books and through discussions with their family members and neighbours. The YIF had asked the children to collect the information in writing and paper clippings. Children made use of their own text books as well as from class 4, 7 and 10. The students, with the help of teacher and YIF, designed the format, collected the needed information and pictures, typed the content and edited the text of the document.

Consolidation of the information gathered

The gathered information was collated and compiled by the YIF and the teacher who taught English in the school. The YIF facilitated the children in keying in of information collected into the computer.

4.3 Process

The individual project teams used to meet the YIF every day to review the progress. Learning committee members supported the project accompany the children for taking the photographs and in making the arrangements for the presentation function, gathering the community members and support in terms of arranging the mike, getting some dress made for the cultural activity for the function.

4.4 Roles & Responsibilities

Role of the Learning Committee

The 'Learning Community' was formed consisting of 20 members - educated unemployed youth, housewives, parents and ex-students two months before the projects were initiated. Four members (Mr Ambarish, a local youth club member, Ms Parwathamma a housewife, Mr Rajachari a tailor and Mr Babu an SDMC member) from the group extended their support to children in collecting the information and making arrangements for the screening function.

The other committee members worked during the screening of the projects on 15th August Independence Day celebration. All the parents were invited to attend the function.

Role of children

The children formed into three groups identified a topic of interest and collected the relevant information by interacting with the family members, elders in the village, and looking into the books of high schools for pictures and information.

- The children had a major role in selecting the topics for the projects. The Physical Education teacher and YIF discussed the project in the class.
- All the three teams went around the village, the farms, bus stands, and neighbourhood gardens with camera to click for pictures of their selected topic. The children were excited about this activity since they were free to venture out with the camera to photograph their favourite objects.
- They talked to community members, elders, parents, teachers and their own siblings.
- They collected the pictures and drawings for the project.
- They gave their own voice over to the text and created their own folders
- They keyed in the content with help of the YIF.
- The children presented their projects on the Independence Day to the parents and community who applauded their work.

Role of Teacher/YIF

The teacher and the YIF were given the role of facilitator for the chosen task in the Learning Committee meeting. The role played by the YIF was of a guide, trainer and team leader for all the projects. The YIF envisaged the project, planned it and helped the children to complete the projects. She along with another teacher compiled all the information that was collected by the children and filled the gaps and completed the text. She also helped the children to type the collected document/text in the computer using the local language editor; helped them to enter the data in the power point presentation.

The YIF trained the children in composing their own voice-over for the text with subtle intonations, language etc. and assisted the children in developing the presentation through power point application. In this school the role played by the teacher was marginal. However, 2 teachers saw the pre-final version and appreciated the efforts of the children.

4.5 Outcome

At the end of each project the children were able to produce an amateur documentary film on topics that they felt they needed to know more about. The three documentaries had songs, special effects like animation play and titles with names of the children involved, etc. Children from class 5 with the help of some children from class 7 developed a project on 'Plant'. The team from class 6 worked on Transport and another team from class 7 was involved in a project called "Soil". All the three themes are within the framework of the school curriculum. The children shared/presented the projects developed by them on 15th August to the community. A brief account of the projects is presented below:

Sasya (Plants)

A group of 12 children from class 5 with the support of 8 children from class 7 developed the project on Plants. Though none of the children could explain exactly why that particular topic was chosen, they said the teacher asked them to suggest some topics and one boy (who seemed to be a leader) suggested 'Plant' as a topic and it was accepted by all in the class. After the selection of the topic the children were involved in various stages of the project like- taking the photograph, collecting information from the text book.

This particular documentary has 15 slides, including the name of the children who were involved in the project. The content of the slides includes information on roots in particular: what is the function of the root, stem, leaf, and flower. Other slides included information on various parts of the plant, tree and flower and its functions; fruits and its function; uses of plants, etc.

There is detailed information on plant classification and the uses from the plants. The document addresses the products of the plants like vegetables, fruits etc. There is information on examples of medicinal plants and cereals and pulses that are locally grown in their village. The document also touches upon forest and its various uses and some of the issues related to ecology and environment.

Children have merged the clipping pictures collected from various places with the still photographs that they clicked during the project and have added an appropriate text to the each slide. The animation play has been embedded in each slide. The class 5 children gave the voiceover to the text and the slides have background music.

Sarige (Transport)

Twelve Class 6 children were involved in this project. The children said that the teacher spoke about the project in the class and suggested some topics, including water. The children came up with several topics like Transport, Village, TV, etc and after a discussion agreed upon Transport.

This project starts with the concept of transport and the role or importance of transport in the development of any country. Like in the previous project the transport project too has 15 slides. The information ranges from the origin of transport to developments that have taken place.

The project takes us through the various modes of transport that are developed over a period of time. There are pictures of cart, bus, auto rickshaw, train, ship, rocket, plane and car and the distinct usage of transport for transporting men and materials have been highlighted. The children have collected and added the picture of hill train, Himalayan Queen, to their slide on Railways. The photographs of the bus and lorry that pass through their village have been captured. The document has a picture of car and airplane with the text mentioning that traveling by car/airlines is an unaffordable mode of transport for the poor. The children said that their Science Text Book had a lesson on transport and that helped them to have a framework. The

children worked on the project for 2-3 hours every day during PT class, SUPW class and during the period when the teacher was absent. The children were very much involved in taking the photographs for the project. They went out to the Bus Depot to take photographs. During the discussions with the children they said that they were involved in activities like collecting information from book, family and neighbours, taking the photographs, speaking into the mike, typing in Kannada and working on computer.

Mannu (Soil)

A team of 12 children from Class 7 was involved in this project. The Physical Education teacher and YIF discussed the project in the class. Curiosity in knowing more about soil and since it was part of their subject they chose 'soil' as topic. Children collected information from 4th, 7th and 10th text Books, from parents, siblings and a member from Learning Committee about the subject.

The document includes information on how soil is formed, definition of soil, types of soil, uses of soil etc. There is information on soil erosion and the reasons for soil erosion and how to protect the soil from soil erosion. There is a slide on fertility of soil and how to retain the fertility of soil. There is an attempt to discuss the how deserts are formed and what is grown in the desert. During the discussions with the children from this class it was found that they felt working on this project as more interesting than working on the 'plant' project.

It is interesting to note that they have included the information on earth worm (which is generally found during the monsoons in the soil) and they have taken the photograph of the worm and written about it as one of the mechanisms (along with use of cow dung as fertilizer) used in the village for enhancing soil fertility.

4.6 Learnings as expressed by the children & the teacher

- Children said that they learnt basic computer skills; keying in English and Kannada
- Most of them said that they were surprised to see their own creation; they were feeling more confident in using the computer and making the project
- Children said they learnt voice recording skill and speaking into the mike
- Some children also mentioned that they learnt many English words while doing the project.
- They said that they learnt many things beyond the curriculum and developed personal rapport with the teacher and computer teacher (YIF)

4.7 Observations

Positive observations

- There was a lot of excitement among the children and the YIF.
- Topics were selected by students themselves (facilitated by the teacher and YIF).
- Children talked to their parents, relatives and other villagers on their topic.
- They collected information, pictures and drawings, etc.
- YIF was involved actively and constantly encouraged and guided the students in the projects.
- The children are also in the process of developing individual projects.
- Group project concept was on - work was shared by group members; children clearly mentioned that the experience in Local Content Project was more exciting as compared to Trimester since this assignment involved team work and project planning. During the project they learnt a lot of soft skills unlike in the Trimester projects which are part of the state government curriculum.

- Provided an opportunity to the children to interact with the world around with a magnifier glass.
- It has created a sense of ownership among the children (during the discussions with the children they were so excited that all of them wanted to show their contribution to the project – like picture taken, text keyed in etc.).
- It has enhanced their technical skills like using the software applications like paint brush, Baraha, Power point presentation, camera, etc.
- Children worked in a group for the project.

Other observations

- During discussion with the children none was able to articulate the concept of 'Local Content'
- During the discussions with YIF it was observed that she was constantly stressing on the point that it was children who did everything and she hardly helped. But the interactions with the children clearly showed that the role of YIF was very prominent.
- While the project has 'Learning Committees' as a major component, there was no sign of the committee being involved in developing the local content except helping the teams for the arrangements screening function.
- There did not seem to be any evidence of the participating children gaining more knowledge from the project work on subject matter. The children said that most of the information was gathered was from text books available in the school. For instance, though a few children mentioned that there was a 'Horticulture Office' near their school, they said they did not go there to collect any information on plants; instead they referred to class 3 EVS textbook.

4.8 Conclusions

- Interest among children to participate in the Local Content Development Programme was high. However, the content created by the children in all the 3 projects was more academic than local. All the three presentations were identical.
- The programme helped in enhancing the computer skills of the students, building team spirit, instilling work culture and developing connections with the community in which they lived.
- Though the local content development programme was aimed at promoting creativity among the children and to contribute to both their scholastic and co-scholastic learning, impact was seen in children acquiring soft skills like observation, written and verbal communication, planning and coordinating, etc; and technical skills like using web-cam, and other computer application packages.
- If the motivated teachers and committed members are associated with the project, Local Content Development programme may contribute to the all round development of the child by building his/her cognitive, psychomotor and effective domain skills while simultaneously preparing the child for the adult life ahead.

5 OVERALL CONCLUSIONS

5.1 Summary

- The Local Content Development programme has very ambitious objectives. These have been met to varying degree in the three schools studied.
- The children in all schools who participated in the projects enjoyed the process and have picked up / got acquainted with a few new skills – using the web camera, using the Kannada language software, preparing power point slides, collecting information from other community members, working in teams etc.
- The project seems to have been executed much better at the Agara school than the other two schools. This is perhaps a reflection of the commitment and the openness of the teachers there to new ideas and experiments, led by the Head Teacher.
- As a beginning, this is a wonderful experiment and needs to be carried forward, perhaps with some minor improvements in the processes followed.

5.2 Suggestions

- The topics selected should be related to the local content – local practices and culture rather than academic and text book material. This aspect would primarily have to be the responsibility of the teachers who would need to be oriented and trained accordingly to provide guidance to the children.
- The children should be trained/facilitated to develop the Local Content using scientific approach - observation, inferring, collection of data, classifying and analyzing the data collected and present it rather than reproducing the academic topics. It has perhaps not been tried it in the past but we could explore the possibility of talking to the children directly and explain to them the concept of the programme and what is expected from it. This could of course be done in the presence of / jointly with the concerned teachers.
- The interest of the children, which generates the energy level in them, greatly depends on the facilitator available to nudge them forward when they get bogged down. Hence the teachers/YIF should be specifically trained. They need to fully appreciate the concept of the programme and help the children accordingly without 'controlling' the project. At the 5th, 6th and 7th standard levels, the children are capable of coming out with various innovative ideas. The teachers/YIF should 'let go' of the children for this project and allow them to make 'mistakes'.
- All children should be included in such projects to negate the threat of widening the gap between different levels of learners and excluding some children as slow learners. Admittedly, to begin with, only some children would be involved. But thereafter, the other children should get the opportunity to do their own projects.
- Perhaps the programme should be implemented in those schools who come forward voluntarily and where the teachers do not feel yet another programme has been imposed on them.
- There should be constant interaction with the 'Learning Committee' members and their role should be clearly defined. The possibility of including the SDMC members should be explored because they (SDMC members) are the representatives of the ultimate stakeholders in the schooling process.