

**An Experiment with Learning Incentives as an
Intervention Strategy for Effectiveness in Primary
Education by Introducing Need Based Pedagogic
Projects Among the Students**

Roma Deb Halder
West Bengal, India

*International Seminar on
Researches in School Effectiveness at Primary Stage
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NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING
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AN EXPERIMENT WITH LEARNING INCENTIVES AS INTERVENTION STRATEGY FOR EFFECTIVENESS IN PRIMARY EDUCATION BY INTRODUCING NEED BASED PEDAGOGIC PROJECTS AMONG STUDENTS

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Introduction : - In a remote village far off from big city, among 20% literate and 80% below poverty level population of 2000 the above mentioned experiment with the only State run Free Primary School helped bring back life, vigour and enthusiasm among students, teachers and villagers too. Students attendance rose from 30% to 85%, teachers average attendance rose from 50% to 94% and villagers indifferent or negative attitude turned into positive and intervening attitude toward their school. Therefore it may be said that well equipped teachers with properly selected project-activities could bring back the primary education from its down-grading position to quite a high and satisfactory position both in quality and quantity without any change in financial or other physical facilities in our present day schools.

Background of the school, venue of my experiment :

Let me elaborate my story a bit further. The school concerned is a Partly Basic Primary School. Nearby villages of the school are mostly Muslim and lower Hindu caste populated. The literacy rate is 20% and 80% people lives below poverty level. It is 150 km. Away from the city of Calcutta and 10 km. Away from Bolpur a small rural town. In 1985 when I happened to join the school I found the school having 5 teachers in its pay-rolle but 2 to 3 teachers would be found visiting school in any working day.

There were 160 students enrolled in the register but hardly 40 to 50 students used to visit the school every day. Once being interrogated by classmates one of my absentee student remarked, "Why I should go to school and take pain in reading and writing and she will be enjoying big salaries". Sometimes I found distribution of mid-day meal (tiffin) among the students. To my dismay it was found that the teachers used to carry home a big share of loafs meant for the tiffin to the students.

There was no fixed time for the teacher to come to school. It may be any time between 11.30 to 12.30 p.m. Students usually came by 10 O'clock even earlier and started playing, climbing trees, gossiping or quarreling with each other. After a good discourse with any topic from cricket to crocodile breeding the teachers used to hold classes not before 12 or 12.30 p.m. Even during class hours lady teachers did not hesitate to work with knitting engaging one or two girl-students to pluck gray hairs from her crown. By 2-30 p.m. every thing was over with schooling and there rung the closing bell for the day. Both the students and teachers retreated from the school.

Starting point of the experiment :

At the above-mentioned school environment I joined the school being transferred from elsewhere. I started thinking how to work to bring back the whole school environment in order and in proper tune with the students, with the teachers and with the villagers too. I started hardly with 10 students in my class, who were physically present though I found there were some 50 students in my register of standard I. Step by step I took the following course of action very slowly and continue for last 13 years when I feel to assert that at last I become successful in my mission.

My school time table with 15 extra curricular & 12 curricular classes

Time table			For Class-II			1999	
Day	10.30		11.00	12.00		1.30	2.30-3.30
Monday	Cleaning Campus & Prayer	M	Maths	Bengali	I	<u>Recitation</u>	<u>Health</u>
Tuesday	-do-	E	Bengali	Maths	N	<u>Nature study</u>	Story
Wednesday	-do-	D	Maths	Bengali	T	<u>General Knowledge</u>	Drawing
Thursday	-do-	T	Bengali	Maths	E	<u>Collection of leaves, feathers etc.</u>	<u>Katum-Katum</u>
Friday	-do-	T	<u>Manasanka Problem solving</u>	<u>Alphabets</u>	V	<u>Games & Sports</u>	<u>Recitation</u>
Saturday	-do-	O	Class test	<u>Sahitya Sabha</u>	A		
		N			L		

- Red mark classes are extracurricular

STAGE - I

My activities step by step - Dealing with mother's love :

I started dealing with the students with love and care of a tender mother. In those days often it could be seen that some of the younger students with open wide fearful eyes are sitting on my lap and listening me, may be story telling or reciting rhymes from children's book of Abol-Tabol of Sukumar Roy. Within a few weeks time I gained confidence of them. Their fearful countenance changed into smiling and gayful. They took me as their friend and playmate.

Next: I found the children are suffering vastly from soars on their hands and feet due to scabies and soars in their mouth due to Vitamin deficiencies. I found them with the habits of spitting here and there or rubbing dirty noses with bare hand or with the end of dresses. I looked into it ; cut nails, repair or re-button torn-out shirts, trousers or frocks; applied home made lotion for scabies or distribute vitamin-tablets free of cost. Soon mothers joined with me and in no time I was able to make the children neat, clean, tidy with good health habits dressing with ordinary but washed and clean dresses. Often mothers used to visit me and took advice for some problem of her kid or called me home when some kid was found ill with fever or other maladies.

STAGE – 2

Class teaching :

I did not start conventional teaching of language or history, maths or geographey but started with telling story, reading story books like Khirer-putul of Abanindra Nath Thakur or story books of Russian publications , reading rhymes from Sukumar Roy. Upendra Kishore Roy or Jogindra nath Sarkar etc.

Result found :

They become attracted and interested with my class. This interest was soon transmitted to other absentee students too. Slowly out-of-school children began to come back. Within three to four months time my class became full of students enrolled. Number of absentee students was soon hardly one or two each day.

STAGE – 3

How to sustain this interest longer :

Now the question is how to sustain this interest longer without fading away. In this respect I had to plan out new projects for my students, I thought that the projects should have two facets. In one it should bear some pedogogic values i.e. it should involve one or other development aspects of the students may be in the area of learning language or maths or history etc. whereas in the second it should bear something to fulfill the basic needs of the student ; may be economic, may be public appreciation or may be need of his mother's kitchen or of his own play ground.

STAGE -4

Method of teaching adopted Co-operative learning :

Slowly I changed over and now I am working with co-operative system of teaching -learning process departing from individualistic mode of treatment in class teaching. Here the whole class of say, 30 students are divided into 5 groups of heterogeneous composition - good or bad, bright or dull, all together to make 5 unified working groups.

All the groups are given the same activity in language or literature, problems of mathematics, even activities with games, sport or crafts, etc., etc. Groupwise and not individually they have to face and solve the problem and groupwise their work will be appreciated and accredited. Group leaders are taking joyfully the responsibility to help the less gifted students in learning or solving the situations. Dull or lagging behinders who are normally shy unopen to teachers are found wide open to his friend and co-learner. He now seems much more active in facing the situation. In traditional teaching these students always show a passive attitude in such situation. The low level students are developing much better taking help from his co-learner as well the high-level students also are mastering the subject much better because of repeated recapitulation and in the practice of teaching others. I found the result is quite hopeful and I feel there are lots yet unexplored in this direction.

STAGE -5**Introduction of various projects :**

I introduced the following projects which are ever increasing day by day since 1985.

Example of few projects experimented with

- 1) Writing and posting letters to relatives
- 2) Collection and identification of common herbal plants.
- 3) Preparation of wall magazine
- 4) Preparation of annual calendar
- 5) Organising Sahitya Sabha.
- 6) Practice Katum Kutum of Abanindranath Thakur
- 7) Practice in silent meditation.
- 8) Practicing in age-old traditional Alpona.
- 9) Kitchen Gardening
- 10) Collection of Butterfly larva and rearing it.
- 11) Maintaining daily diary writing.
- 12) Organising class picnics
- 13) Story telling class
- 14) Recitation class
- 15) Class sports
- 16) Drawing class
- 17) Collection of birds feather and preservation with short description.
- 18) Manasanka (Solving easy puzzles or easy problems) in mathematics instantly.

- 19) Reorientation on alphabets
- 20) Scrap book preparation.
- 21) Leadership training
- 22) Vending flowers etc
- 23) Social work
- 24) Candle lighting in evening at school premises

❖ **Project No.1. Writing and posting letters to relatives**

Initially I supplied with post cards written with proper addresses collected from the guardians.

I wrote the letter on the black board, they copied and I posted. In months time most of them reported being extremely happy that their nany, fufu or chacha has duly received the letter and responded verbally through messengers. It was a great experience for them that they could send messages to their far off relatives. Later on I used to take them on outing to the nearby Post Office 1 km. Away. We walked through vast green paddy field enjoying the nature. On the way I had the opportunity to talk to them on certain unknown plants, on grassofars or a dragon-fly which we came across on our way.

On reaching the Post Office I initiated them to purchase Post cards. I took them under a tree, they wrote the letter and posted it into the box. I remember I had to explain to them how the letter is reaching to a particular nany or fufu who are supposed to be unknown to the old bald-headed post master. We came back to school after a tiny expedition which was extremely enjoying to the students

Here my students got scope of using the language for very practical purpose of their family need. Thereafter some of some of them took particular care to write in good hand-writing. This practice of writing letter makes them interested for language class in reading or in writing lessons.

I am happy to mention here, a letter written by one polio affected crippled student of mine was able to draw attention of a project officer of the department of Education, who is trying now to send this boy to Calcutta clinic for treatment and rehabilitation. This is no doubt a big prize for my tiny project.

❖ **Project No. 2. On nature study and health**

With the help of guardian and others I made the student to collect, identify locally available herbal plants, its leaves or flowers or seeds etc. some of the plants are named

as follows :	Kalmegha	<i>(Androgrophis Paniculata)</i>
	Veranda	<i>(Jatrapha sp.)</i>
	Kulakhara	<i>(Hygro-philla auriculata)</i>
	Thankuni	<i>(Centella asiatica)</i>
	Jandis	<i>(Phyllamthus sp.)</i>
	Tulasi	<i>(Ocimum sanctum)</i> Sacred basil
	Tejpata	<i>(Cinnamomum ; tamala)</i> Cassia lingnea
	Hincha	<i>(Enhydra sp.)</i>
	Neem	<i>(Azadiracta indica)</i> Margosa
	Basaka	<i>(Adhatoda vasica)</i> Malubar nut

Vringarraj (*Iridax prokumdens*)

Shephali (*Nyctanthes arhatrstris*)

Pepe-(Carica) *Papaya*

Gandhavadal (*Paederia foetida*)

Brahmishak (*Nasturtium officinale*) Water cress

Pudina (*Mentha piperita*)

They pasted leaves, flowers or seeds on to their exercise book, wrote a little description of it, its use as medicine. I got report latter that some children collected particular leaves or seeds, made their mother to prepare the medicine, took it and got rid of maladies like common cold, cough, worm, etc.

❖ **Project No. 3. Sahitya Sova (literary activity)**

Following the practice at the school of Visva Bharati, Santiniketan I arranged for weekly sahitya sova as a regular routine activity. Students organise the sova. They preside, read story, rhymes or poetry. They read news of current cricket plays or of current news from papers, radio or T.V. They sing gajals or songs of Maharam, they stage drama too.

❖ **Project No. 4. Practicing mediation**

Just after general session of prayer of the school at the start of our class I introduce the practice of silent mediation where the whole class along with myself sit under tree or on the open varanda to meditate for 3 to 5 minutes everyday. This mediation works wonderful on the behavioural pattern of the students.

❖ **Project No. 5. Story telling class**

As per time table we have story telling period. I read or tell stories from various children's books published from home or abroad. In some classes they are also asked to tell stories of their own or the story they listened from me or from their mothers. Needless to say that the children enjoy this class wholeheartedly as well as they acquire the capacity to speak boldly and clearly before a gathering.

❖ **Project No. 6. On the reciting rhymes or poems**

Similar to story telling we have classes to enjoy rhymes or poem to our heart-content. Sometimes I read sometimes they do and we all enjoy the rhymes or beautiful poems with its narrations, rhythms and beauties. Through enjoyment we try to grow interest for language and literature.

❖ **Project No. 7. Preperation of wallmagazine**

I select writings of the students, read in sahitya sova for wall-magazine may be story or rhymes or anything interesting. I also select drawings or paintings from drawing classes for wall-magazine and guide them to write it neatly on an art paper and decorate it with drawings collected. They hang it on the wall for the whole school to go through it. This extracurricular activity is very much interesting for them.

❖ **Project No. 8. Preparation of annual calendar**

The students are guided every year to make one big annual calendar on an art paper decorating it with paintings and showing every details with the months, weeks, dates and days. We hang it in our class and use it whenever necessary.

❖ **Project No. 9. Maintenance of daily diary**

The students are encouraged to write daily diary. They do it joyfully with interest. Every day they show it to me as home work. Many interesting news I used to get from their diary like replacing the eggs once taken away to its nest, or killing the poisonous cobra along by the student. We often read interesting diary to the whole class. In this project I found scope to develop skill and interest in expressing of oneself through language.

❖ **Project No. 10. Katumkutum (on craft activity)**

Katum-Kutum introduced and named by the famed artist Abanindranath Thakur. This is a kind of art or craft activity with forming using stray or waste articles like used up match box, piece of ribbon, cloth or paper or a piece of white-ant eaten dry branch etc. etc. These articles properly selected could be made into a man playing a harmonium with a golden turban wearing on his head. With the above idea my children made flying birds, crawling snakes, jumping hare, running deer, hopping kangaroo, dancing girls, etc. etc. The children enjoy this activity very much. This kind of craft activity cost you nothing but it can encourage creativity among the students developing power of observation, aesthetic senses and lastly manual skills in using simple hand tools.

❖ **Project No. 11. Practicing alpana**

Just to beautify the school campus I often hold this project. We take some suitable place on varanda or in front of the building or around some tree. We clean the place and practice the age-old alpana. During Swaraswati Puja or independence day we use to beautify the place with this alpana where we use various colours, flowers, seeds, even dust of char-coal, sand or powdered bricks etc. This is also another place where the student could see that their activity or free expression is being appreciated by the elders.

❖ **Project No. 12. Kitchen gardening**

My class raised a small kitchen garden growing brinjals, chilli, tomato, papaya and other flowers. Children enjoy very much tilling the ground with spades, manuring it with cow-dung, planting and watering the plants regularly. Here after I have seen the children to love plants more than before. They guard the plants from cattle or from others from its destruction. They changed their old habits of unnecessary plucking flowers or leaves or destroying the plants. Whatever little product they got from their garden like brinjals, chilli etc. they use to distribute among the poor neighbours living behind the school.

❖ **Project No. 13. Collection of birds feathers**

They use to collect feathers of most of the local birds, set it in their exercise book with its identity, where available, description of the bird with its habits of eating, nesting, laying eggs, etc. The project increases interest about the world of birds and to love the nature.

❖ **Project No. 14.** **Collection of butterfly larva and rearing it**

Students use to collect larva of butterfly or moth which is available in this locality. They keep it in a well ventilated glass jar, cleaning the jar everyday, supplying particular leaves as its feed. Everyday they observe from out side the jar it's the growth and transformation of the larva to pupa and lastly to a beautiful butterfly. They take every care for its proper growth and finally let it fly out to mother nature. The project is ever amazing and interesting to the students. It induces a love for nature in the depth of their heart.

❖ **Project No. 15.** **Drawing and forming**

I introduced free hand drawing and painting as well as clay modelling. Needless to say that the school does not have any fund for the purpose to supply with the materials. The poor teacher has to take over the burden on herself to supply with art paper, pencils or water colour boxes.

❖ **Project No. 16.** **Games and sports**

In our regular class routine I introduced practice of games and sports for amusement also for their physical growth and fitness. I encourage them practicing high jump, long jump, run, simple gymnastics, and some games too. Some time I use to invite expert games teachers from nearby university of Visva-Bharati to guide and coach them.

❖ **Project No. 17. Manasanka (Solving puzzles and easy mathematical problems instantly)**

In this class the students are divided into groups and asked the solution of some easy problems or some easy puzzle. The whole class raised to a competitive mood and each student participates in the class to win the competition. This class perhaps makes the students mentally alert to solve the problem facing them.

❖ **Project No. 18. Vending flowers (An Economic Programme)**

I found that during spring festival Santiniketan girls-students are in difficulties collecting flowers for the celebration. We have plenty of flowering trees like Palash around my school. I used to encourage some of my strong and capable students to make a group, pluck flowers and sell it at Santiniketan. I have the record earning by individual student as high as Rs. 80/- in one year.

❖ **Project No. 19. Preparation of scrap book**

This is known project where the student use to cut out photos or print of paintings from news papers or other source, paste it with short description of the content on the page of their scrap book. Here one can find scene like Shachin made an over boundary or the Prime Minister is addressing the public. One can see devastating rail-accident, furious hurricane destroying forest, trees, houses, etc.

❖ **Project No. 20. Leadership Training**

For every week one student is selected as leader of the class. This boy is empowered to look after the order of the class, to look after the behaviour of his class-mates, to arrange for out door classes with games, crafts or outing etc. During school celebration like Puja, independence day, picnic or outing these students get ample task to guide the classmates for the purpose. Thereby they get scope to nurture the aspects of leadership dormant in them.

Findings of the research activity so far described

Introduction of the students need based projects in primary school and sincere, continuous work with it for last 13 years resulted as follows among the students, among the teachers, among the villagers and lastly in changing the school atmosphere.

Change found among the students

1. Students are easily attracted to the project with self-interest
2. This interest is transmitted easily to the study of general curriculum of the school
3. Students gained self-confidence in speaking, reading, writing and achieved more in their personality development.
4. Students admission rises from 160 to 275 within a few years.
5. Students attendance rises from 30% to 85% (comparing 1985 to 1998)
6. Drop out in primary stage diminished almost totally.
7. Teaching learning process in general improves and a good number of students are getting chance for admission in high schools

This situation is just reverse to what was in 1985

Changes found with the teachers of the school

1. The dynamic and sincere work of one class directly influenced other teachers to change their unfitting mood of action.
2. Other teachers are found to take more interest with their classes and also they are trying to work out similar projects which was quite out of sight earlier.
3. Attendance of teachers to school improves a lot
4. Teachers are found far more active than before.
5. Bad practices like sharing midday tiffin with students, knitting wool within class, plucking gray hair by the students etc. etc. are all abandoned by the teachers by self imposition

Changes found with the attitude of the villagers toward the school.

Looking to better performance of the children, the villagers are found taking interest with the school as follows.

1. Mothers are coming to school, contacting teachers, discussing problems related study or health problems of the students.
2. Villagers are interfering with the school activities directly or indirectly.
3. They discuss openly school-affairs with teachers and express their opinion freely in favour or otherwise for a particular action of school authority.
4. Sometimes they do not hesitate to charge the head master for his particular action when it goes against the interest of the students like closing the school earlier than scheduled or declaring local holidays undue etc. etc.
5. Villagers active role with the school produced a kind of directive force which controls and guide indirectly the school or the behaviour of the teachers to follow proper line.


The change found with the school environment :

The same school could be found now as follows .

The school positively starts by 11 forenoon with proper prayer, Nearly 250 students are present every day out of total ~~secaial~~ number of 275 students. Most of the teachers are present in time and holding classes in time. The school observes all the functions and festival gayfully like picnic, sports, observance of national celebrations like indepedence day or birth day of Netaji, Panditji etc. The school organises small kitchen garden and also small forestry in collaboration with local Panchayat. The school is having regular extra curricular classes with crafts, drama, sahitya sabha etc. Villagers are also seen coming to school to discuss problems with their children as well as problems of the school too. There are certainly a positive change found with the school without changes with the physical facilities.

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