Revised Rates of NCERT Educational Journals
(w.e.f. 1.1.2009)

Title	*Single Copy*	*Annual Subscription*
School Science A Quarterly Journal for Secondary Schools	Rs. 55.00	220.00
Indian Educational Review A Half-Yearly Research Journal	Rs. 50.00	100.00
Journal of Indian Education A Quarterly Journal of Education	Rs. 45.00	180.00
भारतीय आधुनिक शिक्षा (त्रैमासिक) (Bharatiya Aadhunik Shiksha) A Quarterly Journal in Hindi	Rs. 50.00	200.00
Primary Teacher A Quarterly Journal for Primary Teachers	Rs. 65.00	260.00
प्राथमिक शिक्षक (त्रैमासिक) (Prathmik Shikshak) A Quarterly Journal in Hindi for Primary Teachers	Rs. 65.00	260.00

Subscriptions are invited from educationists, institutions, research scholars, teachers and students for the journals published by the NCERT.

For further enquiries, please write to :

Chief Business Manager, Publication Division
National Council of Educational Research and Training
Sri Aurobindo Marg, New Delhi 110016

E-mail : gg_cbm@rediffmail.com, Phone : 011-26562708 Fax: 011-26851070

CONTENTS

EDITOR'S NOTE

Even though India's recent economic growth is an example for the world's economy in this critical period yet lack of basic health and education facilities are the major challenges that we are facing today. Addressing these challenges now requires our intensive efforts towards strengthening public-private partnership. This is necessary in view of bringing equality in a country like India with huge population and strong diversity. Government of India has been making continuous efforts to provide adequate health and education facilities to the poor and other deprived groups through various schemes and programmes and their impacts are worth considering.

The present issue includes one of the NCERT memorial lectures delivered by P Sainath which highlights prevailing condition of have and have-not in our society. The lecture presents a view which states that the questions of inequality are not only economic or political but also moral. India's social and economic problems must be addressed directly and earnestly. In this context, role of education for bringing social change in terms of equality cannot be undermined. Two research articles one on the implementation of Sarva Shiksha Abhiyan written by Mahmood Ahmad Khan and Feeroz Ahmad Koul and the other by Kartikeswar Roul on the National Programme for education of girls at elementary level reflect status of efforts made in this direction.

Not only access, issue of quality is another important concern which often draws attention of teachers, teacher educators and educationists. Classroom processes need to be improved for all the stages of school in view of bringing quality. In this context findings presented in the research articles contributed by Ravindra Kumar Parashar, Vikramjit Singh and K. M Rajan emphasise the need for improving classroom pedagogy to bring quality in science education. In view of promoting language learning in schools, R.Meghanathan's article attempts to make a case for projects for language learning and discusses the possible ways and means of designing and carrying out projects as language learning tasks where learners work with

language for a period of time. Another article on language learning contributed by Bernadette D' Souza presents dramatic activities as an approach for learning of English language. Ziyn Engdasew Woldab in his article provides an idea about the constructivist strategies in teaching of Economics.

Quality in education also depends upon effective school leadership and good teachers. School Leaders are of crucial importance for continued improvement of schools provided onus of taking decisions for schools should lie with them. Rashmi Diwan's article elaborates upon this aspect and S. K Yadav's article reflects the need to strengthen pre-service teacher education programmes in order to provide quality secondary education in India.

The present issue also includes an article by Ashwani Kumar Gaur presenting J. Krishnamurti's thoughts on education which should aim for the transformation and liberation of the human being.

The issue concludes with two book reviews and summary of a position paper about the problems of Scheduled Castes and Scheduled Tribes. We do hope that our readers will definitely get benefitted by these articles and get motivation to share their own ideas, research studies, book reviews related to school and teacher education.

Academic Editor

Slumdogs vs Millionaires: India in the Age of Inequality, Farm Crisis, Food Crisis and the Media*

P. SAINATH**

Abstract

The last 15 years have seen the celebration of the Indian economy as an emerging tiger. And certainly, this is a very different country today from what it was earlier. However, the many achievements and advances have come at a high cost. Inequality in India has grown faster in the last 15 years than it has at any time in the past 50 years. The National Commission for Enterprises in the Unorganised Sector (NCEUS) tells us 836 million Indians live on less than Rs 20 a day, even as the number of dollar billionaires has doubled in five years. The country faces its worst agrarian crisis since the eve of the Green Revolution. Official data show us that over 166,000 farmers committed suicide between 1997 and 2006. Farm incomes have crashed and millions have quit agriculture without proper alternative options. Meanwhile, the media who ought to play the role of informing the public about the direction society has taken are more disconnected from the masses than ever before. Which way are we headed? And can we as a society act differenly?

Every year, for almost 30 years now, the United Nations (UN) puts out a sort of bill that tells us how, for instance, with ten billion dollars a year, every human being will have access to sanitation. Each year, the UN Secretary General tells you what it would cost to end hunger-additional spending of around 15-20 billion dollars each year. To solve the problem of potable water for all, UN researchers tell us that it would cost about 10 billion dollars of further expenditure per annum; 15 billion dollars would provide health to every human being in the world while another 15 billion dollars would send every kid on the planet to school.

We all know these numbers. They are published every year. But what makes them interesting today? While you have been told that with an additional expenditure of 60 billion dollars a year, the human race can solve its most basic problems, this hasn't happened for 30 years because governments tell us there is no money for the two and a half billion people on earth that need it. But when Wall Street collapsed last year, suddenly the governments that could not find 60 billion dollars a year, found one and a half trillion dollars in one week.

When a bunch of CEOs and criminals drive the financial system off the cliff, we have bailouts in Europe, in US and in India, totalling trillions of dollars, all of which were arranged in a few months. Suddenly there is money. When it comes to the needs of the rich, there is always money. Just look at your own country, where it doesn't matter how people are doing, but it matters how the Sensex is doing in Mumbai. When the Sensex was climbing up towards 21,000, it was all joy and glory. Then it sank to 9,000, thanks to a range of factors, including the global recession. Within weeks, the Government of India had released two formal stimulus packages— not for you, but for the country's big companies—and a third informal package, disguised in various administrative orders, and a fourth package in the interim budget. Tens of thousands of crores became available overnight, when Dalal Street's billionaires ran into trouble.

It took ten years and 1.82 lakh farmer suicides for a Prime Minister of India to visit a farm household in this country to find out what was wrong with the farmers. But when there was so much as a tiny twitch in the Sensex, former Finance Minister, Mr. Chidambaram would be in Dalal Street the very next day, even when Parliament was in session. While it took ten years for the Prime Minister to acknowledge that there was a massive agrarian crisis. It was eleven years before some kind of a relief package came into play (only for Vidarbha in specific terms and for all others only in terms of the loan waiver). For Dalal Street, when the corporate world ran into trouble, it took no little or no time for the first two stimulus packages—worth a lot more money per capita than the farm packages—to roll out.

No world that is so unequal, so disparate, so iniquitous, can be sustained in that fashion. This is one of the lessons you need to draw from the meltdown of Wall Street. It was impossible and inconceivable that a country could continue to function with CEOs salaries exploding at the one end, and the wages of working people actually contracting for years at the other end; working people who were then supposed to buy the products that companies are putting out while contracting salaries and wages.

There's no way the meltdown could not have happened. Anyone, even a child, could see that a system so unequal couldn't be sustained. You would have to be an economist to believe that it could. It's ironic: the same experts who never once predicted there was going to be a crisis, the very same jokers, are trotted out night after night on television as experts who tell you what went wrong and how to save your money (after it is lost). Now, these economists and experts

give you acute analysis. But they didn't predict any of it for ten years, the great exceptions being non-mainstream radical economists. Did you really think that the meltdown was something that happened overnight while you were asleep? It took decades of carefully constructed policies and frameworks to land the world in the mess that it is today and none of these champion economists could even hint that this was going to happen. What is their credibility? They do not even have the grace to say they didn't know a damn thing when the crisis happened.

The last 15 to 20 years in India have been the period of the greatest inequality that the country has ever seen in the sixty years since independence. There has never been a period with sharper divisions between regions, peoples, classes and castes. Now we all know that India has had inequalities and disparities for a very long time. So what makes the last 15 to 20 years different?

There is indeed a very serious difference between the inequality of the last 15-20 years and the one preceding it. Inequality existed for the first four decades after independence, too. And as an independent nation, you tried addressing it. All the data show us that inequality actually declined in the first 40-45 years since the country gained her freedom. Then it started growing sharply from the early '90s. The difference is that while inequality may have existed earlier, never in our history as an independent nation has it been so cynically constructed, so ruthlessly engineered by conscious design and policy.

The trickle down theory of economics, whereby you accumulate wealth at the top and it will seep down below, has been a favourite in this era. The trickle down theory is simple. All the food there is has to be on my table. But since my table cannot accommodate all that food, a few crumbs will fall off, and you guys get to eat.

Let's step out of India for a moment. If you look at the U.S. Bureau of Labour statistics, you will find that the United States is now loosing about a thousand jobs per hour with the recession. There has not been one month in the last five when it has lost less than half a million jobs a month. It lost close to two million jobs in the last three months;December, January and February. We are talking about haemorrhaging to such an extent that you are loosing 22-23 thousand jobs every 24 hours. That is not an ordinary situation. By the way, the recession was declared as a recession in the U.S. eleven months into the recession. They're telling you now that since December 2007, there has been a recession, and hey, by the way, you have lost 3.6 million jobs since that time.

Here is something that you ought to know. In the period during the year 2008 that the United States economy lost 3.6 million jobs, corporate CEOs took home bonuses worth 18 billion dollars. How do we even try and solve the problem? By giving hundreds of billions of dollars in bailouts to the very guys who caused the problem?

The biggest bailout in history is given to a company called AIG, the insurance group that has now entered India as TATA-AIG Life. Around September, the life went out of the AIG. It then received a 150-160 billion dollars bailout, the single largest bailout package on the

planet at that time, from the U.S. treasury. What does AIG do with it? It gives out tens of billions of dollars in bonuses to its top executives and holds its executive retreat at a luxury resort in California, where it pays 1,300 dollars a night for a hotel room.

Now 15-20 years ago, you couldn't have got away with this in any part of the world. Nobody has paid the price of such indiscretion. Because that's the sort of world we have constructed in the last 20 years. The last time the planet saw a thousand jobs per hour being lost was at the time the Soviet Union collapsed. In other words, maybe you are not witnessing the collapse of an economy, but the collapse of an entire system. Though we may take a very long time to recognise it, if we do at all in our lifetime. You are witnessing something very large, something historic, in your own lifetime, if you will take a closer look. When last has the leading economy in the world lost a thousand jobs per hour? The trend is awful.

Look at India and the recession. *The Times of India*'s front-page headline asks, "What recession?" And its story says we are selling more cars than before. As I flew in yesterday, I saw the front page of Business Standard, which said, "Slow down?" Not if you ask the FMCG guys, they are doing so well. You know, if governments keep on putting huge stimulus packages worth thousands of crores into companies, I'm sure they will do okay, as would the rest of us if we were to get stimulus packages.

According to the Government of India, between September and December last year, when the U.S. meltdown began—I say began because the meltdown hasn't ended by far—this country lost half a million jobs. Now this figure is as frightening as it is outrageously fraudulent, because they are only counting jobs lost in sectors where it is possible to count, such as IT and a few others, where one can make some sort of estimate.

The jobs being lost by migrant labourers in this country right now are in millions. Let me give you an example that's a good indication of the kind of globalisation that we have built. A recession in the United States leads to thousands of bankrupt homes in a single district of Odisha called Ganjam. Why? In this country, tens of millions of people earn their living as migrant labourers. Odisha has one of the largest populations of migrant labourers because there is not enough work there. Livelihoods of the tribals in Odisha have been destroyed by a variety of factors that are not uncommon in the North-East itself. Increasingly, millions of Oriyas are going out and working in different parts of the country, such as Punjab and Gujarat. There are lakhs of Oriya labourers in Ahmedabad and Surat, mainly in the latter. In Surat, they work in the lowest rung of the diamond industry but in far greater numbers in the textile industry. Basically, these powerloom workers are concentrated in export-oriented units.

Now what happens when there is a recession in the U.S.A.? Export orders fall or vanish. By April-May, there could be no renewals of export orders. So the *maliks* are laying off tens of thousands of workers or reducing their wages sharply while extracting more work from them. Now what happens to those workers who lose their place? They catch

the Ahmedabad-Puri Express and head back to Odisha. Most of them are from Ganjam, which, by the way, is the district from where Odisha Chief Minister Navin Patnaik fights elections. Now we could have upto two hundred thousand people returning to a district that they had left because there was no work. What will happen to the food security in that area, or the public distribution system? Can it cope? What is it going to do to the daily wages of labourers when a quarter of a million additional people land up in the market? What is it going to do to the minimum wage? And this is just one group of affected people.

Hundreds and thousands of workers from Anantapur in Andhra Pradesh have migrated from their hometown for work. Three lakh work in Bangalore and adjacent areas alone, while 40-50,000 are in Tirupati. Many more migrate to other parts of India. What happens when these hundreds of thousands of Anantapur workers from Karnataka and Tirupati go back to their district in Andhra Pradesh? What happens to the daily wages there? The wages sink because there is so much labour, and not enough work? Your National Rural Employment Guarantee programme would have to increase to six or seven times its present size to cope with the extent of stress and disaster.

When you are talking of records of low-level rates of inflation, please notice what has come down. The food prices have not come down though the oil prices may have. You know, India is one of those economies which defies the logic that what goes up must come down. When it comes to food prices, just mark the graph since 1991.

When I was in Mahbubnagar, the poorest district of Andhra Pradesh, last May, the temperature, by Mahbubnagar standards, was a pleasant 46° Celsius, because it gets hotter than that. The price of food went up 45 per cent on average between 2004 and 2008. The price of wheat, has gone up by 62 per cent in that time. (And all of them have risen further in the past eight months.) Do you know what that did? It wiped out the pensions for all the senior citizens.

We wrote about this in *The Hindu*. People in their seventies were returning to work at the NREG sites because there was no food at home and their old-age pension was only Rs 200. What would you buy with rupees *two hundred a month*? A kilogram of rice, a kilo of arhar dal and a few other things thrown in, were enough to wipe out your two hundred rupees, especially since *dal* was Rs 65 a kilo.

When poor households have a food crunch, widows and the elderly get totally marginalised as they are seen as non-productive. I was interviewing a 74-year-old man, at 46° Celsius, breaking stones in Mahbubnagar.

At this moment, as the B.M.Pugh memorial lecture is going on, what is happening in Southern Rajasthan, where there is a large concentration of very poor tribals? In Kotara *Tehsil* of Udaipur, for instance, these people are so poor; they walk across the border for 40, 50 and even 60 kilometres into Gujarat to find work. They work for a week and come back with some money. Now in this period, the landlords are laying them off, just before the harvest. Why? So that they will not have to part with a share of produce to that labourer.

Traditionally, you give one-fifth or one sixth of the share of produce to the labourer.

Do you know how the tribals of Udaipur manage their hunger? In one sense, it is horrifying but in another sense, it speaks well of the tribal culture and its sense of collective preservation. What they are doing is quite appalling; you can call it 'rotating hunger'. A family has eight members and they are now so low on nutrition that it is hard to do the physical labour that is required. So what do they do? Two members of the family eat well today while the others virtually starve, so that those two members of the family can go out and work. The next day it's another two, the third day it's yet another two. I call it rotating hunger. But in the process they are trying to look out for all eight members of the family.

It is just outrageous that people have to go throug crop production. Last year, I don't know whether or not you remember this, when the food prices were rocketing, President Bush made an announcement that there was an increasing food crisis in the world because Indians and Chinese were eating too much. Let me tell you, our own leaders and economists were quite pleased with this, because it showed what a success story we were. There were newspapers in this country that wrote editorials saying President Bush is speaking the truth, though we don't agree with him that it is a bad thing, we feel it's a good thing, as it shows how well we have been doing — and similar blather.

Here is a simple fact that every Indian needs to know. It's frightening that, from the mid to the late nineties, for the first time in our history, the rate of growth of food grain production is consistently lower than the rate of population growth in the country. That has not happened in the first 30-40 years of our history. It happened from the mid nineties because of the kind of development framework and policies we adopted from the early '90s, specifically from 1995. You can mark that during the '50s, '60s and '70s, there may have been one year or two when there was a drop in food production. But never has there been such a steady decline and drop, promising catastrophe, as this one. If you take five year or three year averages at a time and check the rate of growth of food production from the mid nineties, it is lower than the rate of growth of population. The great gap has widened. This means that our nation's food security is in an extremely fragile and delicate state.

The great achievement of independent India was self-reliance in the food sector. We made ourselves self-sufficient, and now we have endangered that. Also, please note that the rate of growth of food production is lower than the population growth rate, in a period when the population growth rate has been declining, not going up. And we talk of record food production! I love it whenever they come to these things. They give absolute numbers, not percentages. 210 million tons record foodgrain production, they say. So next year, if it is 210.1 million tons, is that another record? What is it per Indian? What is it per capita? Please tell us those numbers, give us the percentages.

I will tell you what they are. In 1991, when this country set out on the great new economic policies that we celebrate,

the net availability of food per Indian (i.e., cereals and pulses) was 510 grams. What was the last figure available? The final figure on the net availability per Indian is 422 grams in 2005-06. Does this mean that there is a fall of 88 grams? No, it does not. It is a fall of 88 grams × 365 days × 1 billion Indians, which translates (as Prof. Utsa Patnaik has repeatedly pointed out) into the average family consuming 100 kilograms of food grain less than it did 10 years ago.

Now we know that all of us sitting in this room are not consuming less. While the cake is shrinking, most of us sitting here are eating better than we ever did 10 years ago. The question is, if the cake is shrinking, if the food available per Indian is shrinking, and 15 to 20 per cent of the population, including all of us here, are eating better than we did 10 years ago, what the heck are the bottom 40 per cent eating? You get the answer when you see a 74-year-old man coming out to break stones in 46°C. He has no choice. He has a horrible lower back problem and he can hardly stand for more than two hours (so they try to give him less arduous work than that, but it is still too much for someone at that age and so severely undernourished most of his life).

In this great success story of India Shining, India's child malnutrition figures are the worst in the world. If you look at U.N. data on the percentage of underweight children below the age of 5 in the poorest societies of the world, the figure works out to 25 per cent in Guinea Bissau, 38 per cent in Burkina Faso, Sierra Leone has 27 per cent, Ethiopia 38 per cent, and India 47 per cent.

But the difference between India and those countries is that there isn't this extraordinary super rich class in the latter. None of these societies doing so badly (yet better than us on such indicators) had our kind of growth, resources, or skills. We do not have a single one of the excuses that they do. But we persisted with the creation of structured inequality, till by 2007— the peak year—we arrived at a situation where India ranked fourth in the world, until two weeks ago, in the number of dollar billionaires.

With the figures I am giving you, you could call this lecture 'Slumdogs versus millionaires.' The numbers I am giving you on human development are from the United Nations Human Development Report, those on food are from the Government of India, and the numbers I am giving you on billionaires are from the Forbes Billionaires List.

By 2007, this country ranked 4th in the world in the number of dollar billionaires and 128th in human development. Unfortunately, because of the recession, there has been a blood bath in your billionaires, who are now down to 24. But if you think that's fun, you have fallen from 128 in human development to 132.

In the human development index that United Nation creates each year, ranks countries according to particular parameters on standards of living, which involve the mass of people and not only the elites of the capita income. In addition to GDP per capita, it also looks at how countries are faring in education, nutrition and life expectancy. At rank 132, where does software superpower India figure in the list of nations? Who is above us at 131? Bhutan. At 130, there's The Republic of The Congo. Even Bolivia,

the poorest nation in Latin America, is about 20 places above us, while Vietnam, a country that fought a war for thirty years against the most powerful armies of the world, is way above us. China is at 94, Cuba is at 48, and we are at 132. Again, consider that many countries, far poorer than us, who have never had anything like our growth rates, have performed better than us. Bolivia, Bhutan, The Republic of The Congo, all are in that category.

Also very important is that the wealth of our 53 billionaires — now down to 24 — accounted for 31% of our GDP. If you look at the Forbes list in 2007, before the meltdown, the wealth of our 53 billionaires came to 335 billion dollars, which is about one-third of your GDP.

Now four of the world's ten richest men are Indians—the two Ambani brothers, Mr. K.P. Singh of the DLF and Mr. L.N. Mittal, of course. By the way, two of them live in the same city as I do. One of them, Mr. Mukesh Ambani, is engaged in the pleasant exercise of building the costliest residence on the planet with 27 floors, a theatre, three helipads and 600 staffers and parking for 168 cars. Even the 27 floors are unusual for they will rise, in one estimate, to a height equivalent to that of a regular 60-storeyed building. This, in Altamount Road, where the real estate values can match or exceed those of Manhattan, New York.

Now *The Times of India*, which is the other great chronicler of wealth, did a 90-day test in 2007, about what the ten richest men in the country earned in 90-180 days. They added 65.3 billion dollars to their existing income, i.e., they were adding 30 million dollars an hour,

or 700,000 dollars a minute, to their income. It is not clear from *The Times* report whether this was for 90 or 180 days. Even if it were the latter, that rate of earning would $350,000 a minute.

At the other end of the spectrum, 836 million Indians live on less than Rs 20 per day. That fact and figure appears on Page 1 of the Report of the The National Commission for Enterprises in the Unorganised Sector.

If you think that is shocking, 237 million of those get by on Rs 9-12 a day, at a time when 53 individuals have possessed a wealth equal to a third of your GDP. You cannot sustain that kind of inequality. You can do it for a while – then it goes bust like it did in the United States of America, which is our role model. Not only will we faithfully imitate its positives, but we are also proud of imitating its negatives.

When you are talking about ten people adding 700,000 dollars a minute to their income, you are talking about the highest rates of earnings in this country's history. But please compare that with agricultural labourers who make up 45 per cent of the poorest in this country. Are they earning seven hundred thousand dollars a minute? The maximum you can earn on the NREGA, which is the best pay an agricultural labourer can get, is a dollar and fifty cents, maybe just over two dollars a day in very few states, but not more than that. That's Rs 90-110.

And the wages of the agricultural labourers do not change by the minute of the day. On the contrary, every 8 or 10 years, there is a new minimum wage announced in a state after much fighting and struggle. How much has the wage of

an agricultural labourer moved in the last 10 to 20 years, never mind minutes?

So, while 53 people accounted for 31 per cent of GDP 836 million lived on less than Rs 20 a day. It shows you what a fraud your poverty line is, because less than a third of those 836 million people are considered below the poverty line in this country. To achieve that distinction, you have to earn less than twelve rupees a day. If you are earning eighteen rupees a day in Mumbai you are above the poverty line in official reckoning. Try living on that in Mumbai, one of the costliest cities in India.

It is absolutely fascinating, if you look at the NCEUS (Chairman Dr Arjun Sen Gupta) report, how the gap between the super rich and the merely rich or better off is greater than the gap between the rich and the poor, because the level of concentration is so fantastic. You know what it takes to be in the top 5 per cent of your country? If you spent about Rs 15,000 last month, you'd be in the top five per cent! That's because the obscenely wealthy, the super rich, account for much less than one per cent.

But the report also tells you that 79 per cent of your country's unorganised workers are in the group of 836 million who "get by" on less than Rs. 20 a day. And 88 per cent of all *dalits* and tribals are in this 836 million. So are 85 per cent of all Muslims. So here you are, in a country where a new restaurant opens every day in one metro or the other, but food per Indian has fallen from 510 grams to 422 grams.

This is the country that constantly boasts of medical tourism. But do you know what the National Sample Survey (NSS) Organisation figures tell us?

According to official data, more and more people are coming from the U.S.A. to get operated at places like the Lilavati hospital near my house in Mumbai, because it is a lot cheaper than it is in the States. What does it mean for Indians? The NSS data tells me that close to 200 million Indians have given up seeking any kind of medical attention because they cannot afford it. We are not talking of Allopathy, Homoeopathy or Ayurveda, but how, across the board, 200 million Indians no longer seek medical attention.

There is another list, apart from the list of billionaires and the list on medical tourism, one list that you can't beat us at, where we remain away above the United States. It is the list of costliest weddings in the world. Another achievement for India last year, as we declared a record food output, was that our country fell to rank 66 out of 88 nations in the world in the Global Hunger Index (GHI) of the International Food Policy Research Institute in Washington D.C. Now all this inequality was achieved in the space of 15 to 18 years.

If you compare the 1991 census and the 2001 census, you will find that eight million people have quit farming. Where did they go? What are they doing? We don't know, because neither the Govt. nor the media have bothered to take any account of them. They are human beings, they are our fellow citizens. Don't forget them.

Well, if you want the actual figures, in 1991, the number of cultivators in the census was around 111 million, while in 2001 it fell to about 103 million, a drop of 8 million people. We know that they didn't all die, as that would have been

reflected in mortality figures. So where have they gone? I am willing to bet anything that when the 2011 census comes out, two years from now, this figure of by million will be dwarfed by the fact that far more people will have been forced out of farming since then, without guns, without *bazookas*, without tanks, but simply by making agriculture so unviable for small family farms that they live in despair and destitution. You raise the price of everything and commercialise everything. And the hyper commercialisation of agriculture has taken place, handing over its control to corporations.

Now where did those 8 million people go? Did they go to the cities and get jobs? No. The job trend in manufacturing has seen on a sharp decline for the last 15 years. Let me give you two examples of companies that you are all familiar with. Let's take TATA's Jamshedpur Steel Plant. In 1991, as Aseem Shrivastava (*The Hindu*, May 20, 2007) points out, it produced one million tons of steel with 85,000 workers. By 2005, TATA was producing five million tons of steel with 44,000 workers. So "While the output multiplied five times, the employment got halved." Or take Bajaj, one of the largest manufacturers of two-wheelers in the world. In the mid '90s, Bajaj was producing one million two-wheelers with 24,000 workers. By 2004, it was producing 2.4 million units with 10,500 hundred workers. That's less than half the original workforce and more than twice the production. So obviously, the people who left farming did not find jobs in industries. I'm afraid a landless agricultural labourer or a newly landless farmer who has forfeited his land in debt

is not going to be absorbed by INFOSYS. So where did they go?

It is one of the greatest stories of our times if journalists want to look at it. The International Labour Organisation's report on Asia Pacific tells us that between 1997 and 2005, labour productivity in India rose 84 per cent but the real wages in manufacturing fell 22 per cent. Of course, most of this rise in productivity comes by retrenchment, and throwing people out of work using technology. So now the NCEUS also tells you that the rate of labour absorption actually turned negative in the years of our greatest successes. And now we are 132 in human development.

How did we arrive at this situation? Across the world, in the last 20 years, governments have adopted virtually the same stimulus package. You can call it globalisation, neo-liberalism or whatever else you want. But if you want to translate it into policies, you need to know the policies adopted by most governments across the globe**.**

Withdrawal of the State : Number one, withdrawal of the state from sectors that matter for poor people. The state did not withdraw from the rich. Instead, it become more interventionist and more aggressive on behalf of the rich. On the one hand, the government doles out stimulus packages for industry in days, while on the other hand, it takes 10 years for a Prime Minister to visit an agricultural labourer, a farm household.

Expenditure cuts : The second process involved gigantic expenditure cuts on sectors like health and education, across the board; the slashing of subsides and life supports of people, the way it happened with cotton

farmers in this country. Last year, when the meltdown began, California, which is the 13th largest economy in the world—if you treat California as a nation—was cutting billions of dollars from health, education and nursing services, at a time with the United States was spending 3 trillion dollars on a war in Iraq, an unjust, unwanted, absolutely irresponsible war, and more billions on a war in Afghanistan. Nobel laureate Joseph Stiglitz has written a book called "The Three trillion dollar war." The U.S. has money for war, but its universities and other institutions are suffering huge cuts, and tens of thousands of kids will not be able to go to universities and community colleges this year.

Wealth transfer, a third process : The rapid transfer of wealth from poor to rich. Who destroys the economy? The fat cats, the super rich. Who is giving them money to live? The government. Whose money are they giving? Your money. Taxpayer money, public money. In the U.S. public money is going to bailout AIG, so that you can have another meeting at another holiday resort at a $1300 a night, for its executives.

Corporate Power : The next process, and this is central to what has happened in the last 20 years, is the unbridled, unrestrained rise of corporate power— the power of large corporations to lobby, to make policy and to shore up or bring down governments. It is no secret that just before the trust vote on July 23rd last year, the Prime Minister invited both the Ambani brothers to his office to talk to them, after which the Samajwadi Party, for the first time in the history of the Socialist Party of India, voted for the Congress. No Lohiaite Party has ever

voted for the Congress before, but it happens after the two Ambani brothers meet the Prime Minister. Now you can put your two and two together and come out with 22 or four or whatever you please, I leave that to you.

The unbridled rise of corporate power is such that when 3.65 million people were laid off jobs in the U.S., companies could give themselves bonuses of 18 billion dollars for the CEOs around the same time. And after the meltdown, they could continue to give bonuses from bailout money coming from a bankrupt society and bankrupt people.

The imposition of user fees and costs in government hospitals and in government educational systems, which poor people could not afford, was another of these processes that came about almost everywhere in the world. There was a mindless deregulation of just about everything.

The privatisation of everything : There's another critical process that I call the privatisation of everything including intellect and soul. These days, there is a very popular word in vogue. We describe somebody who stands up for something as a public intellectual. I've never understood this. Maybe we have to use the word public intellectual, because so many of our intellectuals have gone private. I mean, they are working for some think tank, for some corporation, for some company. Well, do you know what all we have privatised in this country? Maharashtra has now privatised the river and the dam. Chhattisgarh was the first state in the country to privatise the river– Sheonath. Well, maybe these governments got so tired of selling people down the river, so

they decided to sell the river.

But let me tell you that Bombay is the trendsetter in privatisation. You know that on every Indian railway station, there are little kids who sit polishing shoes, the shoeshine boys. In Bombay we privatised that space, too. What do those kids earn? They earn maybe 100 rupees a day, out of which they pay a huge chunk to the *local dada*. Then various other predators take their cut, so the kids go home with Rs 35-40 in a city like Mumbai. We privatise those tiny spaces at 15 lakhs per shoeshine space. A wonderful story done by a young reporter named Rukmini Srinivasan in *The Times of India* got the whole thing thrown into the cooler, but it shows you what their intentions are, and the intentions of the government.

The growth of inequality : The next process is the stunning rise in inequality, which we have described, and finally, the dominance of the ideology, I call market fundamentalism. It is as religious a fundamentalism as any other religious fundamentalism. It's only worse because it contributes millions of recruits to all those religious and other fundamentalism by destroying millions of lives and livelihoods.

According to the National Crime Records Bureau, at least 182,936 (one hundred and eighty two thousand, nine hundred and thirty six) farmers committed suicide over eleven years between 1997 and 2007. Let's look at the emerging trend, by dividing these eleven years into five years and six years. The rate at which people were killing themselves in the second six years is much higher than the rate at which they were killing themselves in the first five years. The trend is relatively worse. Over the second six years, it works out to an average of one farmer killing himself or herself every thirty minutes.

What are you seeing on your front pages? IPL. The only thing that matters seems to be whether the Indian Premier League is played in England or in South Africa. And your media are so obsessed with it. For the first time, I've seen them being so critical of Mr. Chidambaram, who is otherwise a media darling, (he speaks with the right accent). For the first time, he is actually saying the right thing; that the elections are far more important. The security issue is important enough to make us hold elections in five phases. It would be foolish to attempt to hold the IPL at the same time. But you should see the media bashing of the government on the issue of how they let IPL go out of India.

There are lessons for us to learn from the fact that farm suicides in the Eastern and the North Eastern parts of India are very low. I cannot say that you are onto a good thing. I can only say that you are not onto a bad thing. I'll tell you why. Two-thirds of these suicides in India occurred in five states which have a very similar model of farming. These five states account for one-third of our population, but two-thirds of our farm suicides—Maharashtra, Karnataka, Andhra Pradesh, Madhya Pradesh and Chhattisgarh. Kerala, too, has high numbers, but it is these five that top the list and make up two-thirds of all farm suicides in India. Now farmers' suicides are occurring at an astonishingly higher rate than general suicides. Maharashtra, the richest state in the country, has had 40,000 farmers'

suicides since 1995, and 37,000 since 1997. And Maharashtra is home to 21 of the 53 dollar billionaires had in 2007.

What do these five states have in common? Overwhelmingly, these suicides are of cash crop farmers, not food farmers. Overwhelmingly, these are chemical farmers who use a lot of pesticides, lots of high cost inputs, and either Bt cotton or other kinds of seeds manufactured and controlled by multinational corporations or large Indian companies. These are farming models that have been given to the over-use of fertilizers and excessive use of pesticides, a model that is far less seen in the Eastern and North Eastern States of India.

In Andhra Pradesh, my home state, we have some of the most fertile land in the planet. And yet, in the Godavari delta, we use well over two times the national average of fertilizers. Farmers in this region have got locked into a model that's killing the soil and erasing the nutrients, and the more they do it, the more fertilizer they are going to need, the more chemicals they are going to use the next year. You in the North-East have not fallen into that trap, not anywhere near to that extent anyway, and please don't get into it. Improving agriculture and productivity is a must, but don't think this is the only route.

What was the driving force behind these suicides? Debt. In the period when we doubled and tripled and quadrupled the number of billionaires in the country, the indebtedness of the Indian peasantry doubled from 26 per cent of farm households in 1991 to 48.6 per cent by 2002 and by much greater numbers by 2007–2008, before the Govternment of

India came up with its loan waiver.

Why did people get into such debt? Very much as a result of the economic policies that successive governments have adopted since 1991. The typical World Bank IMF Formula for poor countries to do better was to shift from food crop to cash crop, which can be exported to hard currency countries. So in this country, a nation of subsistence farmers, agricultural labourers, small and marginal farmers, we shifted millions of farmers from food crop to growing vanilla, cotton, sugarcane and all sorts of other cash crops, using credit as the bait.

The risks in growing cash crops are incredible for a very poor or small farmer. I am telling you, there are a lot of things that haven't yet happened to you, but they will, if you do not watch out. Let me tell you about the cost factor. Let's take the year 2003, the vanilla boom period in Kerala. It then cost Rs 8,000 to cultivate one acre of rice in Kerala, and even less in eastern states like Orissa. Now that farmer growing paddy gets shifted to vanilla. Do you know that the cost of production of vanilla for one acre was? Almost Rs 150,000. So *his costs have gone up 16 times.* What does it mean? It means his borrowing too, goes up many times. The loans he is taking go up also perhaps 16 times, the risks he is taking go up 16 times, so when he goes bust he can never repay.

Most of these farmers who killed themselves were cash crop farmers. Often, they were people who had cultivated food crop but had made the shift from food crop to cash crop. They got into very extravagant cash crop cultivation, which they grew without the

security of an internal market. So the shift to cash crop by policy was a disaster for millions of Indian farmers. Who consumes vanilla in this country? Of world consumption of around 2700 million tons each year, about 1900 tons (or over 70 per cent) is consumed in the United States.

When we herded them towards cash crop, we threw a bunch of subsistence farmers into the whirlpool of volatility of global prices in that sector, which are controlled by a handful of corporations— Cargill, Monsanto, etc., and we let them pay the price of our decisions.

For years now, the suicides have been occurring swiftly. Now we even record more than one in the same household in some cases. After the husband kills himself, six months later the wife takes her life, or the youngest daughter commits suicide. It is appalling. I don't want to narrate to you the kind of experiences that I have had.

But it is not just about farming, it is about the predatory commercialisation of everything. Let me give you an example. I was once so pleased that in Andhra, while I was in that state, a farmer was rescued from a suicide attempt. Usually, I always land up to cover the body. But this guy was rescued by his friends, who hoisted him onto their shoulders on a cot and raced 5-6 kms across the field, breaking their shoulders with the man's weight on a bed, which they carried till they got him into a jeep and rushed him to a hospital.

And yet in the hospital, he was abusing the friends who had saved his life. It was in very colourful Telugu that he was describing their ancestry and everything else. I just could not get it.

We told him in Telugu that his friends had saved his life. "Your wife, your children, they owe something to these people, why are you abusing them like this?" we asked him.

He looked at me with utter contempt and said, "You don't get it. Why did I try committing suicide? Because I had landed a debt of Rs 100,000 over four years and could not repay it. Now these friends come and rescue me and they bring me to a hospital. It took me four years to develop a debt of one lakh rupee in farming, but with four days in this hospital the bill has come to Rs 49,000. Why the hell didn't they let me die?"

You know something, if I give you a map of India, which shows the indebtedness of farm households state-wise, and I give you a map of farm suicide households state-wise, they fit like hand and glove. Andhra Pradesh, if you remember in the early 2000s, had the highest number of suicides. There, 82 per cent of all farm households here were in debt. The figure stood at 65 per cent for Kerala and 62 per cent for Karnataka. Wherever indebtedness was highest, there were suicides taking place. Why was the indebtedness so high? Because we moved to a particular kind of farming and we 'deregulated' the markets and input prices.

It used to cost Rs 2,500 to cultivate one acre of cotton in Maharashtra in 1991. I am not speaking of organic farmers but of your typical Green Revolution farmer. Today it costs the same person Rs 13,500. So the cost of cultivation has gone up more than 400 per cent, while the income of the farmer has fallen. And we have done nothing to prevent the United States and Europe

from dumping their highly subsidised cotton in this country — millions of bales — over the last few years. We do nothing to protect our own marginalised and starving producers. You can import cotton at zero duty now, though India is the second largest producer of cotton in the world.

Do you know how high the subsidies given to cotton producers in the U.S. are? While the total value of cotton production in the U.S. in 2005-2006 was 3.9 billion dollars, the subsidy was 4.7 billion dollars. The European Union matched those U.S. subsidies for its own producers— so that cotton coming into India is in some senses virtually free, and it destroys the prices of our cotton farmers. Because our government is not willing to raise import barriers against the dumping of highly subsidised goods, even though this would be legitimate even under existing WTO rules.

But too many people have been bought out. Half of the agricultural ministry appears to work for someone else, not for this country. When looking at the subsidies of those countries, you can see that the daily subsidy on a cow in Europe comes to 3.25 dollars a day, more than twice of what you earn on the NREG for nine hours of work.

My friend, Vijay Jawandia, the leading agrarian intellectual of Vidarbha, summed it up brilliantly. Interviewed by a young journalist who asked him, "Mr. Jawandia, what is the dream of the Indian farmer?" he replied, ".... the dream of the Indian farmer is to born a European cow."

Now what is appalling to me is our attitude and how we have reacted to the incredible distress of our times. 182,9236

suicides is the largest single sustained wave of suicides in human history ever recorded. Yet, I would say, don't take the suicides as the *measure* of the crisis; the suicides, horrendous though they are, are simply a reflection of it. There are many households where there have been no suicides, but which are in as bad a shape as those where there have been suicides. The suicides are the tip of the iceberg. They are not the cause of the crisis; they are its outcome, its consequence. They reflect the widespread distress across the country.

And what is our attitude? I've been working on this subject since 2000. I have visited 750 households which have suffered suicides. For the first seven years, there was pure denial. 'This is not happening,' was the attitude. However, we managed after a while to pin down these figures (182,936 farm suicides between 1997 and 2007). And these numbers are entirely from government sources and constitute a gross underestimate, but they are bad enough. They are from the National Crime Records Bureau (NCRB). Finally, the government of India could no longer deny them. Though, it must be said, this does not deter the Chief Minister of Chhattisgarh from denying them. After we released these figures, he released a statement saying that it is not the suicides that should be investigated, but the journalists writing about them. In Maharashtra, the government set up a commission headed by Mr. Narendra Jadhav, to study the situation of Vidharbha's farmers, which dedicated four pages to yours truly, after which I found myself on the front page of the *Mumbai Mirror* under the headline

"Sainath Defames State." Well, it's a badge of honour for me.

After seven years of pure denial, Mr. Sharad Pawar finally confirmed the situation on the floor of Parliament (question No 238, Nov 30th, 2007). "Yes it is true," he says, and he gives a state by state, year by year figure which, to the last decimal and dot, is the same as the figures I had published. (At that point, from 1997 to 2006.) The Union Agricultural Minister finally found some time for a mention of agriculture. Otherwise, he is always on cricket. But he adds one rider when he says, "However, it is not necessary that these people committed suicides due to any causes related to agriculture." I guess they were very disappointed at being knocked out in the first round of the World Cup in India, so they all took their lives.

Then come the media. In the heart of Vidarbha, in Nagpur, while I'm addressing journalists who had covered the damage, a leading journalist with 25 years of experience raises a question which I've been asked a dozen times, based on what the government routinely tells you (and there are some journalists who often act as the PR wing of the government). "Mr Sainath, all these people who committed suicide, did they not do so because they were all drunkards?" he asked me. In other words, the farmers committing suicide did so driven by alcoholism and drunkenness.

I tell you alcoholism is a problem, but if drunkenness and alcoholism are the cause of suicides, my friend, there will be no journalists left in this world. I can speak for Maharashtra, Chennai and Delhi, but I see that it is not a strange idea here, either. And that man is asking me that question was in a region called Vidarbha.

Nowhere else in the world are farmers committing suicides and addressing their suicide notes to the Prime Minister and the Chief Minister. For example: "Dear Prime Minister, after your visit, my hopes went up. I thought things would change. Then I went back to the bank and they refused me a loan yet again. I cannot take this anymore." "Dear Chief Minister, you promised us in your election manifesto that you would add Rs 500 per quintal for the price of cotton, but you reduced it by Rs 500 instead. I cannot take this, I am killing myself." The guy is telling you why he is dying in his own words. You don't need a deep psychological analysis of the situation.

By the way, the suicide figures are far worse than the official ones I've been giving you. You know why? Tens of thousands of people are excluded from the definition of farmer. Can you guess why? Who constitutes the largest group excluded from the definition? Women. Let us not look at a tribal state as an example, but instead, focus on the rest of India. There are no property rights for women by custom. Incidentally, 19 per cent, or nearly a fifth of all farm households in India, are headed by women. And women do most of the work on farms. But when that woman kills herself, it is counted as a suicide *but not as a farmer suicide*, because there is no land in her name. I have had this argument many times with countless *tehsildars*. Their reply remains the same. "Show me the land in her name. How can I call her a farmer?" In this way, large

groups have been excluded from the list and yet you get the largest figure in history — 1,82,936.

What about that credit crunch we are talking about at a time when Mr. Pranab Mukherjee stands up in Parliament during the interim budget and says, "The farmers are the heroes and we have increased farm credit, rural credit." Rural credit is not the same as farm credit. I can build my giant bungalow in a rural area with rural or farm credit. Mr. Mukherjee said that the UPA Government had tripled credit to rural India. And he shows you a jump from Rs 86,000 crores to Rs 242,000 crores roughly. But, as in the case of foodgrain production increases, he gives you the absolute numbers *and not the percentages.* With your GDP growing at the rate of 9-10 per cent, when you convert those into percentages, rural credit has not gone up. Today, according to the Reserve Bank of India's journal, rural credit comes to 7.93 per cent of the total credit in this country, for 72 per cent of the population that lives in the countryside.

You know something else? We redefined what rural credit was. And many times, too. So if Mr. Ambani opens a cold storage in Connaught Place in Delhi, he can get cheap credit for it, because it is connected with agriculture, as the cold storage is for vegetables, and vegetables constitute agriculture. Now the farmer growing those vegetables does not get that credit. And many farmers who've taken their lives have specifically stated in their suicide notes or before their deaths, that inability to get credit was a major factor driving them to the extreme step of suicide. That's been the

case under policies followed by the UPA, NDA, and governments prior to them.

The lowest point in my life was when (especially in 2003-04 before some fall in the interest rates) I covered people killing themselves because they could not get a crop loan of Rs 8,000 or Rs 10,000, unless they paid 14 per cent or 15 per cent interest. (Even higher rates of interest in some cases, because they were being given non-agricultural loans — while industrialists are being given loans with low interest rates in the name of rural and agricultural credit.) And then I would go home to my middle class professional existence in Mumbai and find a letter from the bank waiting for me. "Dear P. Sainath, here is an offer you cannot refuse. Buy a Mercedes Benz and we will give you a loan at 4 per cent interest, no collateral." Where is justice in the world? The people who put your food on your table cannot get the credit for a legitimate livelihood exercise, while others have been given non–agricultural loans as agricultural loans. *Non-agricultural firms can get agricultural credit by saying, "I am selling my Scorpios, and Sumos and Bolero's in rural India."* That's how we meddled with and wrecked definitions of priority sector lending in the Government of India and this has been going on for years.

And what of the loan waiver of 2008? Why didn't the loan waiver come in while farmers were crying for it all these years? Was it announced in 2008 because this was the run up to the election year? So suddenly the loan waiver was thought to be good idea. You know, I was in that area of Vidarbha when the loan waiver was declared.

While the IPL, being played in

Mumbai using zillions of lights, was given subsidised rates of electricity, Vidarbha was having 17-hour power cuts at a time when children were gearing up for their school examinations. Even the *Panchayat Bhavans* in the villages of Vidarbha had no lights. You can imagine how lakhs of children performed in those examinations, compared to their Mumbai counterparts who had a much better situation. Even earlier, by the end of 2005, the government had put up a list of institutions exempted from power-cuts. Schools were not exempted, but fire brigades were. So was the army. One very interesting institution that was exempted from powercuts in Vidarbha were the post-mortem centres. Because they were reeling one body in, every six hours by the end of 2005.

I am a city guy. I was born and brought up entirely in the city and I had no link with rural India until I started visiting there from the '80s and living there since the mid '90s. It is just appalling; in the absence of credit, whom do you turn to? The moneylender. Whole new classes of moneylenders have come up. The old village *Sahucar* cuts a rather pathetic figure in Maharashtra today, as much bigger forces have come into play.

The other day I addressed a meeting of RBI Programme Officers and was able to name systems of credit that they had never heard of: like *Khande Palat.* You know what it is? Let's say Patricia here is a farmer and wants to take a loan from the bank. However, he owes the bank Rs 50,000 because his crop was ruined last year and the last four years have been bad. So Patricia goes to the bank manager, (let's say that's Dr Bhattacharjee), and says give me

Rs 65,000 for my seven acres. He says, "Oh yes, absolutely, not a problem, just give me back the Rs 50,000 that you owe the bank." So he comes to the moneylender. Let us say that's me. I give him the Rs 50,000 . This transaction takes two minutes with all present. There is a link between the bank manager and the moneylender — a paying out of a commission. So the bank manager gives Patricia Rs 65,000 and he gives him back Rs 50,000, so he is left with only Rs 15,000. You know what my cut on that is? You cannot even calculate this interest rate! I get Rs 2,500! The transaction lasts two minutes, not one year. Now he has got just Rs 12,500 to cultivate seven acres with.

This was the case with one Gosavi Pawar, head of a *Banjara* (tribal) clan in that region. While he faced this sort of bankruptcy on the one hand, he was presiding over three weddings in his clan. They were clubbing all their weddings together to save money. You know, the *Banjaras* are nomadic or semi-nomadic. They were coming from all over the country, from Karnataka, Rajasthan, Gujarat, to this part of Maharashtra for the weddings, and Gosavi Pawar was the *bada pitaji* or clan father. He was like the father of all the girls who were getting married, though none of them were actually his daughters.

Now, his agriculture is down and he is not able to raise money for the *saris* for the weddings. Humiliated by the moneylender, Gosavi Pawar takes his life. After that came something very sad, but again, something so good and wonderful about the tribal culture. It was inspiring, though heartbreaking. The tribal elders gathered around and said

that the clans had come from very far and so these weddings must take place, otherwise there would be further bankruptcies (and maybe further suicides). So they persuaded the grooms and the brides to go ahead with the weddings though they were dead against it, because their *bada pitaji* had died.

Now no one had the money. What followed was unique. Some of the poorest people in the world queued up to contribute Rs. 5 or Rs. 10 or Rs. 20, half a kilo of rice, one kilo of *dal*, one old *sari*, one new *sari*. And they conducted those weddings. And at that time, I opened a magazine (an outdated old paper that was lying around in our car) and found myself reading about the costliest wedding in the world, that of Mr L.N. Mittal's daughter in Paris. Wedding houses were very difficult to get in Paris at that time, poor chap. So he hired the Palace of Versailles instead and held a sixty million pound (or dollar) wedding there. And here I was, watching simple people, ordinary people, stand up for each other to help conduct those weddings. The saddest part was when the wedding *baraat* took place and one of the nieces and the husband went out towards the main road as the funeral procession of Gosavi Pawar was coming from the other end. They met each other midway. It is the first time, and I hope the last time, that I saw, in 24 hours, three weddings and a funeral in one household.

If you look at the priorities of our media, none of these crisis are being reflected. If you look at the study done by the Centre for Media Studies (CMS) in Delhi last year, across six channels and six major newspapers, you see that agriculture's share in some of these major channels in 2005, 2006 and 2007 is 0.1 per cent, 0.6 per cent, and 0.19 per cent. Why did it suddenly go up to 0.6 per cent? Because that was the year the Prime Minister visited Vidarbha. The media were not covering agriculture but the Prime Minister. And that gets counted as agricultural coverage. *Entertainment got 9 times the coverage that health, education, environment and agriculture together got.*

At some point of time, we also have to look at our own complicity on this, at the kind of society we live in and what this kind of inequality means. You know, it is very easy in this country to disconnect yourselves from the struggles, sadness and misery of others. There is a long history to it. When Victoria decided to declare herself the Empress of India, she held a *durbar* in this country in 1876, during a period of one of the largest famines in Indian history. And celebrated her ascension with the largest dinner party in history, with 68,000 guests, mostly royalty of various kinds along with their own escorts, so you have a gigantic number of people assembled there, while in Madras and Mysore alone, over 100,000 people died of starvation, while some others were clubbed to death on the barricades the police put up at the cities to stop starving peasants from entering. It sounds rather familiar. Like what you do with demolitions, by throwing out people with no work, who come in from the drought-stricken or otherwise ravaged countryside, onto the streets in the cities.

The questions of inequality are not only economic or political, but also moral. It is also about what we are willing to put up with or stand up against. Or

stand up for. I will refer to just two people who pinned it down correctly, one was Dr Ambedkar, and the other was the great American jurist Justice Louis Brandeis.

Ambedkar made the most prophetic speech heard in the constituent assembly. "Tomorrow we enter an uncertain world of contradictions," said Ambedkar. "We have produced a political democracy without economic democracy. We have produced political equality with extreme social and economic inequality." One day, he predicted that "The lack of economic equality in democracy would devastate our political democracy." The American jurist and legal thinker, Justice Louis Brandeis, was called upon to hear a petition demanding the abolition of income tax. He threw the petition out saying, "You can either have great concentration of wealth in a few hands or you can have democracy but you cannot have both."

An Evaluative Study of Sarva Shikhsha Abhiyan (SSA) in District Anantnag

Mahmood Ahmad Khan*
Feeroz Ahmad Koul**

Abstract

The study was undertaken to evaluate the functioning of centrally sponsored scheme Sarva Shikhsha Abhiyan (SSA) in district Anantnag. The sample consists of all the 507 SSA schools of district Anantnag. Self constructed information bank and check list were used for the collection of data and percentage statistics was used for the analysis of data. The results of the study highlight that SSA has opened 507 schools in all the 12 educational zones of district Anantnag with total enrollment of 23590. A total of 1200 teachers have been appointed making overall pupil teacher ratio(PTR) of 1:20 in all the zones of the district Anantnag.There has been 16% increase in enrollment from 2008 to 2009.No provision has been made by the government for toilet and drinking water facilities in majority of these schools .All the education Guarantee scheme (EGS)centers are housed in single rooms donated by education volunteers (EV'S) themselves. 98% of teachers have received training under SSA. The study also reveals that the overall enrollment of Gujjars and Bakerwals is 447 in these SSA schools.

Introduction

Since Independence various efforts have been made by the government to provide free and compulsory education to the children of the age group of 6-14 years. For this purpose large number of schools were opened by the government. Intensive drives have been made to enroll the children in these schools, but very little attention has been paid to the retention of those children who are already enrolled in these schools. No doubt, new schools are being opened every year, in spite of this, there are various

* *Professor*, Department of Education, University of Kashmir
** *Research Scholar*, Department of Education, University of Kashmir

habitations without primary schools and there are also such type of schools that are having only one or two teachers for five classes. Keeping these factors in view, SSA, a centrally sponsored scheme was started to uplift the programme of universalisation of elementary education throughout the country. In this scheme states are being provided every sort of help to improve the literacy rate in the country. Large numbers of schools are being opened under this scheme; new teachers are being appointed to fulfill the deficiency of staff in these schools. Mid-day meal scheme has been implemented and also new buildings are being constructed under this scheme.

A few research studies have been conducted on the working of SSA; Revathy (2008) found that infrastructural facilities need to be improved. Chauhan and Sharma (2008) in their study on a journey through the primary ladder of education (2000-01 to 2007-08) to assess educational development in all government primary schools except cluster primary schools in Himachal Pradesh has found that the number of students who completed a primary cycle of education in a normal duration of 5 years in Himachal Pradesh is 57641 (62.63%). They have also found that district Hamirpur has produced largest number of primary graduates in the state i.e. 92.11%. DIET, Bheemunipatnam, Visakhapatnam district Andhra Pradesh (2006) conducted study on impact of mid-day meal at primary level in Visakhapatnam district found that the participatory level of community towards mid-day meals programme was not encouraging, 68% of the schools were not having kitchen facility. With regard to

happiness of children it was observed that in almost all the schools the children of all the localities felt happy with the supply of mid-day meals. With regard to quality of food grains almost all the schools are maintaining the quality. Pandey and Zachariah (2006) conducted a study on monitoring of EGS and AIE centers and have found that the average enrollment per center is 57 in EGS, 25 in Apna Vidyalaya, 28 in Angana Vidyalaya, 44 in Basti Vidyalaya, 19 in Vidyalaya Chalo Kendras. It was also found that only 40% of the centers have satisfactorily availability of teaching learning equipment and 60.06% of centers have either manageable (41.05%) or very poor availability TLE. Chauhan, Sharma and Rawat (2006) in their study on in-service teacher training programme under SSA in (sunni) educational block of district Shimla has found that the training component has been judged useful for teachers to a large extent in the areas of; use of teaching learning material (TLM) in classroom situation, activity based teaching and child centered approach followed by subject enrichment. In the sampled schools 61% teachers were found male and 39% female. All India sample survey (2005) was conducted to estimate the number of out of school children in age group of 6-14; it is found that the country has about 19.4 crores children in the age group of 6-13 of whom 6.9% children are out of school. Amongst the out of school children, 68.3% children never attended school and 31.7% were drop-outs. Seetharam (2005) conducted a study on the social integration of children with mild and moderate disabilities in mainstream classrooms under SSA; Tamil Nadu has found that

students at the primary level have scored more in peer group affiliation and academic performance than the disabled students at middle school level. Ohri and Pankaj (2002) conducted a study on the impact of district primary education programme, (DPEP) on girls education in Haryana have found that drop-out rate had shown sharp decline and consequently retention rate of students in primary schools had increased sharply after DPEP, and large number of female teachers have been appointed in primary schools after the introduction of DPEP.

Keeping in view the above discussion there is a need of present study to investigate and to see how far the government has succeeded in implementing SSA in district Anantnag. The purpose of the present study is also to see and observe the conditions in schools that have been opened under SSA in all the zones of district Anantnag. The present study is also an attempt to collect and analyze the data collected from these zones and to see what achievements have been made by this scheme in district Anantnag. The present study is important in order to present the existing conditions of the schools under this scheme so that educational planners and administrators may be able to understand the problem in a proper manner and try to remove hindrances and inadequacies if any. Studies have been conducted on the working of SSA in the states of Himachal Pradesh,(2006), a journey through the primary ladder of education (2000-01 to 2007-08) to assess educational development in all government primary schools except cluster primary schools in Himachal Pradesh. Andhra Pradesh (2005) DIET, Bheemunipatnam,

Visakhapatnam district study on impact of mid-day meal at primary level in Visakhapatnam district, Tamil Nadu,(2005) a study on the social integration of children with mild and moderate disabilities in mainstream classrooms under SSA, Haryana, (2002) a study on the impact of district primary education programme, (DPEP) on girls education in Haryana. But no evaluative study on the working of SSA has been conducted in the Kashmir valley as such the present investigators have made a humble beginning

Statement of the Research Topic

The topic selected for the present investigation was formulated as, "An Evaluative Study of Sarva Shiksha Abhiyan (SSA) in District Anantnag."

Objectives of the Present Study

In order to carry out the evaluative study meaningfully the following objectives were formulated for the present study:

1. To find out the number of Primary schools opened under SSA in 12 Zones of District Anantnag.
2. To study pupil teacher ratio in these schools.
3. To study the total enrollment in primary schools in these zones.
4. To study the increase in enrollment in these schools.
5. To study infrastructural facilities in terms of classrooms, Principal room, staff room, benches, matting, black boards, chairs etc.
6. To check the mid-day meal scheme in 12 zones of district Anantnag.
7. To check the total number of Education Guarantee Scheme (EGS) centers and their enrollment.

8. To study the training facilities available to primary school teachers under SSA.
9. To study the enrollment of Gujjars and Bakerwals in these schools.

Operational Definition of Variables

Sarva Shiksha Abhiyan (SSA) is government of India's flagship programme for achievement of UEE. SSA is an effort to provide useful and relevant elementary education for all children of 6-14 years of age groups by 2012. It is a centrally sponsored scheme to improve the literacy rate in the country.

Plan and Procedure

SAMPLE: In district Anantnag there are 12 educational zones consisting of 507 primary schools opened by SSA. Out of these 507 schools, all schools were selected as sample.

Tools

The data for present study was collected with the help of following self constructed tools:

(1) Information Blank : The information blank was used to collect information about number of teachers and their training, total enrollment both sex wise and class wise, total number of alternative and innovative centers and their total enrollment.
(2) Check List : The check list was used by investigators to know detailed information about infrastructure and other facilities such as classrooms, desks, chairs, blackboard, electricity, toilet facility, drinking water facility, play ground, library, principal room, mid-day meal facility.

Statistical Analysis

In order to achieve the objectives formulated the data collected was statistically analyzed by employing percentage statistics. Zone wise statistical analysis based on this technique has been presented in a tabular form as per the following arrangements.

Table 1
Zone-wise total number SSA schools, total enrollment,
total number of teachers and pupil teacher ratio

S. No.	Name of the Zone	Total No. of Schools	Total Enrollment	Total Teachers	Pupil Teacher Ratio
1	Achabal	48	2244	116	1:19
2	Aishmuqam	34	1723	79	1:22
3	Anantnag	28	1323	77	1:17
4	Bidder	54	2358	126	1:19
5	Bijbehara	54	2412	144	1:17
6	Dooru	28	770	63	1:12
7	Mattan	38	1697	89	1:19
8	Quazigund	32	860	72	1:12
9	Shangus	49	2572	107	1:24
10	Srigufwara	59	2684	138	1:19
11	Vailoo	53	3357	119	1:28
12	Verinag	30	1590	70	1:23
	Total	507	23590	1200	1:20

Table 2
Zone-wise Enrollment Position (2008-09)

S. No.	Name of the Zone	Total Enrollment		Increase in Enrollment	Percentage Increase
		2008	*2009*		
1	Achabal	1908	2244	336	18
2	Aishmuqam	1530	1723	193	13
3	Anantnag	1151	1323	172	15
4	Bidder	1980	2358	378	19
5	Bijbehara	2036	2412	376	18
6	Dooru	693	770	77	11
7	Mattan	1510	1697	187	12
8	Quazigund	783	860	77	10
9	Shangus	2173	2572	399	18
10	Srigufwara	2281	2684	403	18
11	Vailoo	2874	3357	483	17
12	Verinag	1389	1590	201	14
	Total	20308	23590	3282	16

Table 3
Zone-wise Availablity of Infrastructure

S. No.	Name of the Zone	Total No. of School	Facilities													
			Principal Room		No. of Classrooms	Staff Room		Benches		Matting		Blackboard		Chairs		
			No. of School	*%*		*No. of School*	*%*	*No. of School*	*%*	*No. of School*	*%*	*No. of School*	*%*	*No. of School*	*%*	
1	Achabal	48	0	0	102	0	0	0	0	48	100	48	100	48	100	
2	Aishmuqam	34	0	0	72	0	0	0	0	34	100	34	100	34	100	
3	Anantnag	28	0	0	64	0	0	0	0	28	100	28	100	28	100	
4	Bidder	54	0	0	112	0	0	0	0	54	100	54	100	54	100	
5	Bijbehara	54	0	0	121	0	0	0	0	54	100	54	100	54	100	
6	Dooru	28	0	0	59	0	0	0	0	28	100	28	100	28	100	
7	Mattan	38	0	0	81	0	0	0	0	38	100	38	100	38	100	
8	Quazigund	32	0	0	67	0	0	0	0	32	100	32	100	32	100	
9	Shangus	49	0	0	103	0	0	0	0	49	100	49	100	49	100	
10	Srigufwara	59	0	0	124	0	0	0	0	59	100	59	100	59	100	
11	Vailoo	53	0	0	111	0	0	0	0	53	100	53	100	53	100	
12	Verinag	30	0	0	62	0	0	0	0	30	100	30	100	30	100	
	Total	507	0	0	1078	0	0	0	0	507	100	507	100	507	100	

Table 3 a
Zone-wise Availablity of Infrastructure

S. No.	Name of the Zone	Total No. of School	Facilities							
			Electricity		Toilet		Play Ground		Drinking Water	
			No. of School	%	No. of School	%	No. of School	%	No. of School	%
1	Achabal	48	0	0	23	48	09	19	24	50
2	Aishmuqam	34	0	0	17	50	10	29	19	56
3	Anantnag	28	0	0	16	57	08	29	20	71
4	Bidder	54	0	0	23	43	16	30	29	54
5	Bijbehara	54	0	0	27	50	14	26	31	57
6	Dooru	28	0	0	13	46	10	36	16	57
7	Mattan	38	0	0	17	45	14	37	21	55
8	Quazigund	32	0	0	17	53	13	41	20	63
9	Shangus	49	0	0	26	53	10	20	31	63
10	Srigufwara	59	0	0	30	51	20	34	35	59
11	Vailoo	53	0	0	29	55	13	25	35	66
12	Verinag	30	0	0	13	43	13	43	17	57
	Total	507	0	0	251	50	150	30	298	59

Table 4
**Zone-wise Incentives Provided to SSA Schools
(Mid Day Meals and text books)**

S. No.	Name of the Zone	Total No. of Schools	Incentives			
			Mid-Day Meals	%	Free Text Books	%
1	Achabal	48	48	100	48	100
2	Aishmuqam	34	34	100	34	100
3	Anantnag	28	28	100	28	100
4	Bidder	54	54	100	54	100
5	Bijbehara	54	54	100	54	100
6	Dooru	28	28	100	28	100
7	Mattan	38	38	100	38	100
8	Quazigund	32	32	100	32	100
9	Shangus	49	49	100	49	100
10	Srigufwara	59	59	100	59	100
11	Vailoo	53	53	100	53	100
12	Verinag	30	30	100	30	100
	Total	507	507	100	507	100

Table 5
**Zone-wise Number of Education Guarantee
Scheme Centers and their Enrollment**

S. No.	Name of the Zone	Total No. of EGS Centers	EGS Centres Converted to Pry. Schools	Existing EGS Centres	Enrollment		Total Enrollment
					Boys	Girls	
1	Achabal	21	16	05	26	21	47
2	Aishmuqam	15	10	05	22	22	44
3	Anantnag	07	06	01	06	06	12
4	Bidder	44	26	18	96	69	165
5	Bijbehara	18	13	05	21	25	46
6	Dooru	15	09	06	25	28	53
7	Mattan	13	10	03	15	13	28
8	Quazigund	29	15	14	61	62	123
9	Shangus	32	23	09	42	37	79
10	Srigufwara	44	37	07	36	26	62
11	Vailoo	65	37	28	114	123	237
12	Verinag	18	11	07	32	29	61
	Total	321	213	108	496	461	957

Table 6
Zone-wise Number of Teachers Trained Under SSA

S.No.	Name of the Zone	Total no. of Teachers	Teachers Trained under SSA	Percentage of Teachers Trained under SSA
1	Achabal	116	112	97%
2	Aishmuqam	79	76	96%
3	Anantnag	77	77	100%
4	Bidder	126	122	97%
5	Bijbehara	144	144	100%
6	Dooru	63	63	100%
7	Mattan	89	86	97%
8	Quazigund	72	72	100%
9	Shangus	107	103	96%
10	Srigufwara	138	134	97%
11	Vailoo	119	118	99%
12	Verinag	70	70	100%
	Total	1200	1177	98%

Table 7
Zone-wise Enrollment of Gujjar and Bakerwal Students

S. No.	Name of the Zone	Total No. of Schools	Total Enrollment	Gujjar & Bakkarwal		Total
				Boys	Girls	
1	Achabal	48	2244	54	49	103
2	Aishmuqam	34	1723	38	36	74
3	Anantnag	28	1323	00	00	00
4	Bidder	54	2358	15	10	25
5	Bijbehara	54	2412	06	05	11
6	Dooru	28	770	13	10	23
7	Mattan	38	1697	18	12	30
8	Quazigund	32	860	87	15	102
9	Shangus	49	2572	16	13	29
10	Srigufwara	59	2684	24	17	41
11	Vailoo	53	3357	23	25	48
12	Verinag	30	1590	26	22	48
	Total	507	23590	241	206	447

Interpretation and discussion

The Table 1 reveals that the highest number of SSA schools is in zone Srigufwara (59) followed by Bidder (54) and Bijbehara (54) with an enrollment of 2684, 2358 and 2412 having pupil teacher ratio of 1:19, 1:19 and 1:17 respectively. Zone Vailoo is having 53 SSA schools followed by Shangus with 49 schools both having enrollment of 1590 and 2572 with pupil teacher ratio of 1:23 and 1:24 respectively. Zone Achabal is having 48 schools with an enrollment of 2244 having pupil teacher ratio of 1:19, followed by zone Mattan with 38 schools having enrollment of 1697 and 1:19 as pupil teacher ratio. Zone Aishmuqams having 34 SSA schools followed by zone Qazigund with 32 SSA schools with enrollment of 1723 and 860 having pupil teacher ratio of 1:22 and 1:12 respectively. Zone Verinag is having 30

SSA schools with an enrollment of 1590 and pupil teacher ratio of 1:23. Zone Anantnag is having 28 SSA schools fallowed by Dooru with an equal number (28) of SSA schools having enrollment of 1323 and 770 and pupil teacher ration 1:17 and 1:12 respectively. During investigation it was found that schools have been opened in far-flung areas to provide chances of primary education to all. The criteria of at least 1:40 pupil teacher ratio is maintained in all schools and is even more favourable in maximum number of schools. The overall pupil teacher ratio is 1:20 in district Anantnag which is more favourable as compared to criteria of the SSA scheme.

Table 2 reveals the increase in enrollment from 2008 to 2009 in SSA schools of all the 12 zones of district Anantnag, it is highest in zone Bidder with 19% increase in enrollment followed

by zone Achabal, Bijbehra, Shangus, Srigufwara each with an 18% increase in enrollment. In zone Vailoo there was 17 % increase in enrollment followed by Anantnag 15%, Varinag 14 % Ashmukam 13% Mattan 12 %, Dooru 11% and Qazigund 10% increase in enrollment. The results clearly show that the maximum increase in enrollment was in zone Bidder (19%) while as the minimum was in zone Quazigund (10%), results also indicate that total enrollment in all the zones in 2008 was 20308 and it is 23590 in 2009 which shows an overall 16% increase of the enrollment. Various incentives given by Govt. in these SSA schools from time to time and opening of new schools in all most all habitations has helped in increase of the enrollment. This is a positive sign that enrollment has increased 16% in a single year. This also justifies that SSA scheme in district Anantnag has served its purpose.

The Table 3 depicts the infrastructural facilities provided to SSA schools which include principal's room, classroom, staffroom, availability of benches, matting, blackboards, chairs, electricity, toilets, playground, and drinking water facility. The perusal of Table 3 reveals that facility of principal room, staffroom, benches, electricity is not available to any SSA school in all the 12 zones. However other facilities like blackboards, chairs, and matting are available to all schools of all the zones. All the schools are facing accommodation problem as maximum number of schools are having only 2 classrooms for 5 classes. The results also show that most of the schools lack basic facilities. 50% of the schools are without the toilet facility, while 41% of the schools are without drinking water facility. The figures clearly indicate that government is not serious in providing basic infrastructural facilities to these schools because of which children as well as staff members of these schools are facing a lot of problems. During investigation it was seen that in almost all the schools teachers take 2 to 3 classes in a single classroom which totally hampers the teaching learning process. During investigation it was also found that because of lack of accommodation most of these schools have been opened in noisy places which causes bad effects on teaching learning process. Regarding playground facilities, it was found that only 30% of the schools are having this facility, but these playgrounds are not properly maintained because of which students face a lot of problems while playing.

The Table 4 depicts the incentives such as mid-day meals and free textbooks provided to SSA schools. The Table reveals that the scheme of mid-day meal is functional in all the 507 (100%) schools of District Anantnag. Free textbooks are also provided to all the students in all the SSA schools of District Anantnag. Under this scheme variety of food is being served every day. Children are happy with both the quality and quantity of food given to them. But no provision has been made by the Govt. to provide the children micro-nutrients and medical checkup. During investigation it was found that food is being cooked either in the class rooms or in the kitchen of the house holder and no regular payment is made to these cooks. During investigation it was also found that mid-day meals are not being properly served

in some zones of District Anantnag. In the zones of Srigufwara, Aishmuqam and Bijbehara food supply was not given properly to schools, other zones of the District were also facing problems of the food supply. In zone Aishmuqam it was found that supply of food for mid-day meals was not received by any SSA school for four months. However it was found that scheme of mid-day meals and free text books have motivated parents to send their children to schools.

Table 5 reveals that the District Anantnag is having 108 education guarantee scheme centers with an enrollment of 957. Zone Vailoo is having highest number (28) EGS centers with total enrollment of 237 followed by bidder with 18 EGS centers having enrollment of 165, Zone Qazigund is having 14 EGS centers with enrollment of 123. Zone Shangus is having 9 EGS centers with 79 enrollment followed by Srigufwara and Dooru having 7 and 6 EGS centers with an enrollment of 62 and 53 respectively. Zone Achabal, Ashmuqam, Bigbehara are having 5 EGS centers each with enrollment of 47, 44 and 46 respectively. Zone Mattan is having 03 EGS centers with an enrollment of 28, while the lowest number of EGS centers is in zone Anantnag (1) having enrolment of 12 students. The result depicts that zone Vailoo is having the highest number of EGS centres (28) while zone Anantnag is having the lowest number (1) EGS centre. The overall enrollment of boys (496) in these EGS centres is more than girls (461). One education volunteer has been appointed in one Education Guarantee Scheme Centre. All EGS centers are housed in single rooms donated by Education Volunteers (EV's)

themselves. The attendance of students to these EGS centres is not regular. During investigations it was found that among the enrolled students the attendance of some students was less than 50%. But the EV's were seen working dedicately and were maintaining all the school records properly.

The Table 6 depicts the training facilities available to teachers in the 12 zones District Anantnag. The training of 20 days for all teachers each year 60 days refresher course for untrained teacher and 30 days orientation for freshly trained recruits has been provided under SSA scheme. SSA recognizes the importance of teachers and as such is giving intensive training to all teachers. The table also reveals that zone Achabal has 116 total teachers among these 112 (97%) were trained through SSA scheme. Among 79 total teachers in zone Aishmuqam 76 (96%) were trained through SSA Scheme. Zone Anantnag has 77 total teachers among these all 77 (100%) were trained through SSA scheme. Among 126 total teachers in zone Bidder 122 (97%) were trained through SSA. Zone Bijbehara has 144 total teachers among these all 144 (100%) were trained through SSA scheme. Among 63 total teachers in zone Dooru all 63 (100%) were trained through SSA. Zone Mattan has 89 total teachers among these all 86 (97%) were trained through SSA scheme. Among 72 total teachers in zone Quazigund all 72 (100%) were trained through SSA. Zone Shangus has 107 total teachers among these all 103 (96%) were trained through SSA scheme. Among 138 total teachers in zone Srigufwara 134 (97%) were

trained through SSA. Zone Vailoo has 119 total teachers among these all 118 (99%) were trained through SSA scheme. Among 70 total teachers in zone Verinag all 70 (100%) were trained through SSA. This shows that zone Anantnag, Bijbehara, Mattan, and Verinag has the highest percentage of trained teachers while zone Aishmuqam, Shangus has the lowest percentage of trained teachers. There are total 1200 teachers among which 1177 (98%) are trained through SSA. During investigation it was found that all the trained teachers are highly satisfied with training facilities. The teaching learning material is also provided to all the SSA teachers.

The Table 07 shows the zone wise enrollment of Gujjars and Bakerwal students. The results reveal that the total enrollment of Gujjars and Bakerwal students is 447 with 241 (54%) boys and 206 (46%) girls. In zone Achabal, total enrollment of Gujjars and Bakerwal students is 103 with 54 (52%) boys and 49 (48%) girls. The enrollment of Gujjars and Bakerwal students in the zone is 103 which is 4% of total enrollment (2244). In zone Aishmuqam, total enrollment of Gujjars and Bakerwal students is 74 with 38 (51%) boys and 36 (49%) girls. The enrollment of Gujjars and Bakerwal students in the zone is 74 which is 4% of total enrollment (1723). In zone Anantnag there is no Gujjars and Bakerwal students enrolled. In zone Bidder, total enrollment of Gujjars and Bakerwal students is 25 with 15 (60%) boys and 10 (40%) girls. The enrollment of Gujjars and Bakerwal students in the zone is 25 which is 1% of total enrollment (2358). In zone Bijbehara, total enrollment of Gujjars and Bakerwal

students is 11 with 06 (55%) boys and 05 (45%) girls. The enrollment of Gujjars and Bakerwal students in the zone is 11 which is 1% of total enrollment (2412). In zone Dooru, total enrollment of Gujjars and Bakerwal students is 23 with 13 (57%) boys and 10 (47%) girls. The enrollment of Gujjars and Bakerwal students in the zone is 23 which is 3% of total enrollment (770). In zone Mattan, total enrollment of Gujjars and Bakerwal students is 30 with 18 (60%) boys and 12 (40%) girls. The enrollment of Gujjars and Bakerwal students in the zone is 30 which is 2% of total enrollment (1697). In zone Quazigund, total enrollment of Gujjars and Bakerwal students is 15 with 08 (53%) boys and 07 (47%) girls. The enrollment of Gujjars and Bakerwal students in the zone is 15 which is 0.17% of total enrollment (860). In zone Shangus, total enrollment of Gujjars and Bakerwal students is 29 with 16 (55%) boys and 13 (45%) girls. The enrollment of Gujjars and Bakerwal students in the zone is 29 which is 1% of total enrollment (2572). In zone Srigufwara, total enrollment of Gujjars and Bakerwal students is 41 with 24 (59%) boys and 17 (39%) girls. The enrollment of Gujjars and Bakerwal students in the zone is 41 which is 2% of total enrollment (2684). In zone Vailoo, total enrollment of Gujjars and Bakerwal students is 48 with 23 (48%) boys and 25 (52%) girls. The enrollment of Gujjars and Bakerwal students in the zone is 48 which is 1% of total enrollment (3357). In zone Verinag, total enrollment of Gujjars and Bakerwal students is 48 with 26 (54%) boys and 22 (46%) girls. The enrollment of Gujjars and Bakerwal students in the zone is 48 which is 3% of total enrollment (1590).

During investigation it was found that in various zones of the district SSA schools have been opened in Gujjar and Bakerwal localities providing first time chance to these students to enroll themselves. It was also found that these schools mostly lack infrastructural facilities. Most of these schools were never inspected by authorities. The total enrollment of Gujjars and Bakerwal students in the district is 447 which is 2% of the total enrollment (1590).

The findings discussed and analysed in the above chapter are in line with the findings of SSA Madhya Pradesh (2005), DIET, Bheemunipatnam, Visakhapatnam district, Andhra Pradesh (2006) Duraisamy, P, (Tamil Nadu, 2001), Chauhan, D.R. Sharma, Bhupender, Rawat, Jyoti- (Shimla, 2006).

SSA Madhya Pradesh (2005) has found that school buildings were present almost everywhere, the presence of school is a testimonial to the success in enrollment expansion, gross enrollment ratio rose from 96% to 100% in primary education and from 70% to 80% in upper primary education.

DIET, Bheemunipatnam, Visakhapatnam district, Andhra Pradesh (2006) found that 68% of the schools were not having kitchen facility for cooking mid-day meals.

Duraisamy, P. (Tamil Nadu, 2001), found that in the recent years, steps have been taken to provide incentives such as free mid-day meals, uniforms, books, transport and scholarship and the like have drawn children to schools.

Chauhan, D.R. Sharma, Bhupender, Rawat, Jyoti- (Shimla, 2006) found the training component useful for teachers to a large extent in the areas of, teaching learning material (TLM) in classroom situation, activity based teaching and child centered approach followed by subject enrichment. They have also found that TLM was made available to 98% trainees.

Conclusions

1. The study reveals that SSA has opened 507 schools in all the 12 zone of district Anantnag with total enrollment 23590, boys 12307 (52%) and girls 11283 (48%).
2. A total of 1200 teachers have been appointed under SSA in district Anantnag.
3. The criteria of at least 1:40 pupil teacher ratio has been maintained, it is more favourable in all schools. The overall pupil teacher ratio is 1:20.
4. There has been 16% increase in enrollment from 2008 to 2009, which is a good sign and a proof of proper working of SSA scheme in district Anantnag.
5. Though SSA has opened schools in every habitation but maximum number of these school are facing accommodation problem. Majority of schools have been placed in rented buildings with only two or three class rooms for all the five classes.
6. No provision has been made by the government for toilets and drinking water facilities in majority of these schools.
7. The mid-day meal scheme is helping in universalisation of primary education by improving enrollment and   regularity of attendance.

8. Under this scheme, large numbers of schools have been opened in habitations and slums to increase the literacy rate in these areas.

9. All the Education Guarantee Scheme (EGS) centers are housed in single rooms donated by Education Volunteers (EV's) themselves.

10. Though maximum number of teachers has been trained still a small percentage (2%) of teachers has received no training.

11. The study also reveals that the overall enrollment of Gujjars and Bakerwals is 447 which include 241 (54%) boys and 206 (46%) girls. The over all enrollment of Gujjars and Bakerwals is 447 which is 2% of the total enrollment (23590).

Suggestions

1. New buildings should be constructed to deal with accommodation problem with well ventilated class rooms.

2. Toilet, drinking water and playground should be provided to these schools to maintain hygienic environment in these schools.

3. Awareness camps need to be organised at village level to motivate the people for active participation and contribution towards the improvement of the schools.

4. Free textbooks need to be provided at the beginning of the academic session, as during interaction it came into notice of investigator that books are provided during mid session.

5. Regular surveys should be conducted in communities to identify the dropouts and efforts should be made to enroll them again.

6. The monthly honorarium of teacher should be increased from meager Rs. 1500 to a reasonable figure.

7. Talented and hard working teachers should be encouraged and rewarded.

8. Separate kitchen should be available to prepare mid-day meals.

9. Separate rooms should be constructed for EGS centers.

10. Special enrollment drive should be started to increase the enrollment of girl, Gujjars and Bakerwal students.

REFERENCE

ALL INDIA SAMPLE SURVEY. 2005. "To Estimate The Number of Out of School Children in The Age Group of 6-13".

BAL KRISHAN, S.S. NARTA DES RAJ GUPTA, et. al. 2008. *Dropout Children In Himachal Pradesh. http://ssa.nic.in/himachalpradesh.*

BANU, NASREEN and NAGAMANI T. S. 2006. *Identification of Learning Disabilities Among Primary School Children. http://ssa.nic.in/andhrapradesh.*

CHAKRABARTI, A. and BANERJEA, N. 2000. "Primary Education in Himachal Pradesh: A Case Study of Kinnaur District", *Journal of Educational Planning and Administration* XIV (4).

CHAUHAN, D. R. SHARMA, et. al. 2006. *In- Service Teacher Training Programme Under SSA in (Sunni) Educational Block of District Shimla. http://ssa.nic.in/himachalpradesh.*

CHAUHAN, B.R. BHUPENDER SHARMA. 2008. *A Journey Through The Primary Ladder Of Education (2000-2001 To 2007-08*) To Assess Educational Development In All Govt. Primary School Except Cluster Primary Schools in Himachal Pradesh. *http://ssa.nic.in/himachalpradesh.*

IMPACT OF MID DAY MEAL AT PRIMARY LEVEL IN VISAKHAPATNAM DISTRICT. *2006 http://ssa.nic.in/andhrapradesh* DIET, Bheemunipatnam, Visakhapatnam District, Andhra Pradesh.

DURAISAMY, P. 2001. "Effectiveness of Incentives On School Enrollment And Attainment", *Journal of Educational Planning and Administration,* XV (2): 155-177.

GYANESWAR, S.S.1992. "A Study to the Extent of Stagnation and Dropout in the Schools of Manipur", *Educational Research in North-east India (NIEPA).*

INSTITUTE OF PUBLIC AUDITORS OF INDIA New Delhi. 2008. *Report on Monitoring of the Financial Management and Procurement relating to SSA in Delhi. http://ssa.nic.in/delhi.*

JAYAPALAN, N. 2001. *Problems of Indian Education,* Atlantic Publishers and Distributors, New Delhi.

KOTHARI, V. N. 2004. "Challenge of Universalization of Elementary Education in India". *Journal of educational planning and administration,* XVIII (3): 363-378.

MEHROTRA, S. 2006. "Reforming Elementary Education in India: A Menu of Options". *International Journal of Educational Development,* 26(3).

MOHANTY, J. 1992 . *Current Issues in Education.* Cosmo Publications, New Delhi.

MOHANTY, J. 2002. *Primary and Elementary Education.* Deep & Deep Publication, New Delhi.

NAGARAJA, B. 2004. "Towards Literacy Poverty: An Analysis of Non-Enrollment Of Children In Schools And The Need For Their Management", *Journal of Educational Planning and Administration,* XVIII(4): 507-517.

NANDA, S.K. 1982. *Primary Education.* Prakash Brothers, Ludhiana.

BHARDWAJ, NARESH, SURENDER RANGTA. ETAL., 2006. *Taking Education to Out of School Children, In Shimla Town. http://ssa.nic.in/himachalpradesh.*

NAYAK, A.K. and ROA, V.K.2002. *Primary Education.* APH Publishing Corporation, New Delhi.

OHRI and PANKAJ.2002. "Impact Of District Primary Education Programme On Girls Education in Haryana", *Indian Educational Abstracts* **3**(1).

PANDEY, NILESH PANDEYA, et. al. 2006. *Monitoring Of EGS And AIE Centers. http://ssa.nic.in/bihar.*

RAO, V.K. 1999. *Hand Book of Primary, Secondary and Higher Education.* New Delhi

REVATHY, G. 2008.*Organisation Culture SSA State Project Set-Up, Tamil Nadu. http://ssa.nic.in/tamilnadu.*

SAINI, S .K. 1993. *Development of Education System in India.* Cosmo Publishers: New Delhi.

SAKKTHIVEL, A.M. 2008. *Assessment and Realignment of Existing SSA Management System in Tamil Nadu. http://ssa.nic.in/tamilnadu.*

SALEEM, FALAK. 2007. *A Critical Evaluation of Sarva Shiksha Abhiyan in Eight Zones of District Srinagar.* Faculty of Education, University of Kashmir.

SARVA SHIKSHA ABHIYAN. 2006-07. *Analytical State Reports, Elementary Education In J & K Under District Information System for Education.*

STATE PROJECT OFFICE (SSA), H.P.Shimla-1. 2008. *Teachers' Absence in Himachal Pradesh. http://ssa.nic.in/himachalpradesh.*

SSA MONITORING REPORT OF SRINAGAR and BUDGAM DISTRICTS OF KASHMIR STATE. State Resource Centre University of Kashmir. 2007. Department of State Resource Centre University of Kashmir.

STEVENSON, K. BALASWAMY, B. 2006. *Evaluation of the DPEP/SSA Vindham Nerchu Kundham* Radio Lessons - Statewide Broadcasts for School Children. *http://ssa.nic.in/andhrapradesh.*

SUBBA RAO. I. V. BAHL SUSHIL KUMAR. 2005. *A study Assess the Progress with Respect to Achieve SSA Goals in Tamil Nadu. http://ssa.nic.in/tamilnadu.*

VIJAYA KUMARI, M. NARAYANA, et. al. 2006. *A Comparative Study of The Girls Studying in Schools and the Girls Dropped Out in Relation to Certain Social*, Cultural and Health Aspects. *http://ssa.nic.in/andhrapradesh.*

WALIA, J.S. 2003. *Development of Education System in India.* Paul Publisher: Punjab.

Impact of NPEGEL on Girls' Education at Elementary Level in Tribal District of Odisha

KARTIKESWAR ROUL*

Abstract

A number of affirmative activities are undertaken and also proposed under Sarva Shiksha Abhiyan (SSA) to deepen gender awareness and to enhance girls access, enrolment and retention in the school system. These activities can broadly be classified into some broad heads like creating the right environment, improving the reach, ensuring entry into school, ensuring retention, installing gender equity and towards better learning. National programme for education of girls at elementary level (NPEGEL) is an integral part of SSA specially concentrates on girls education in educationally backward block and SC/ST blocks of India. This article has made an attempt to focus on various interventions of NPEGEL programme for development of girls education and its positive effects/impact in achieving universal elementary education (UEE) specially in tribal district of Odisha.

Introduction

The purpose of providing education to girls is to make them play a positive role in their own development or in the development of the nation. Girls' education in particular has assumed special significance in the context of India's planned development. This is because women constitute nearly half of the nation's population representing valuable human resources of our country. It has been rightly said that educate a girl, educate several generations. Expanding educational opportunities for girls is desirable for increasing productivity in the farm, grater labour force participation, late marriage, lower fertility, child health and nutrition. Educationally developed women have been shown to be a critical ingredient in breaking the various multi-generational cycles of poor child health,

---

* *Teacher Educator*, DIET, Kalahandi, At/PO. Bhawanipatna, Dist. Kalahandi (Odisha)

lower educational performance, low income and high fertility. So effort should be made to link girls education to longer social and economic development. Literacy for poor women is a tool for empowerment in a wider struggle against inequality and injustice in society.

Realising the fact that women's education is an important agent of social change, the makers of the constitution made some vital provisions for the spread of women's education in India. The preamble of the Indian Constitution promises to secure to all citizens four noble ideals of justice, liberty, equality and fraternity. To achieve these national objective, the Constitution guarantees on certain fundamental rights in article 14, article 15 prohibits any discrimination and article 15(3) empowers the state to make a special provision for women and children. Article 45 of the part IV of the Constitution provides free and compulsory education to all the children upto the age of 14. In 1976 through ninety third constitutional amendment act, it made education a fundamental right. The National Policy on Education (NPE) 1986 has given very important recommendation for women's education. It has paid attention to the basic issue of women's equality in the section titled "Education for Women's Equality". The Programme of Action, 1992 gave stress on literacy, UEE and making education an effective way for women's equality. On the basis of this policy the government has taken several educational initiatives such as Operation Black Board, District Primary Education Programme (DPEP), Mid Day Meal Scheme (MDM) and Sarva Shiksha Abhiyan (SSA) etc.

Present Status of Girls Education

Gender Parity Index (GPI) and percentage of girls enrolment in primary and upper primary classes, computed for the period 2004-05 to 2007-08 reveal that there is a consistent improvement in GPI. The average of 35 states and UTs in 2007-08 indicates GPI of 0.93 in primary classes and 0.89 in case of enrolment in upper primary classes. Out of 35 states and UTs, Manipur and Sikkim have the highest GPI of 0.99 and 0.98 respectively and Chandigarh the lowest (0.81). The Gender Parity Index of Andhra Pradesh and Assam (0.94), Maharastra (0.89), Madhya Pradesh (0.96), Tamil Nadu (0.94) and Utter Pradesh (0.97) has very high in primary level during 2007-08. But the gender parity index of Rajasthan (0.69), Bihar (0.76) and Gujrat (0.83) is very low, which clearly indicates that a large number of girls in these states are still out of school. The highest share of girls enrolment at primary level is noticed in case of Meghalaya (50.36%) followed by West Bengal (49.47%). Girls' enrolment in Government managed schools is found to be higher than private managed schools at primary and upper primary level (NUEPA – 2009). The retention rate of primary level at national level is 73.90. The retention rate of girls in States like Tamil Nadu (100%), Maharastra (99.35%), Madhya Pradesh (94.91%), Haryana (94.61%) and Himachal Pradesh (93.57%) is more than 93%. But the retention rate of girls in state like West Bengal (51.92%), Bihar (53.63%), Rajasthan (57.32), is very low. The promotion rate, repetition and drop out rate of girls at primary level in national level is 84.3%, 6.6% and 8.1%

respectively. The transition rate of girls from primary to upper primary level of education during 2006-07 at national level is 80.30% which is lower than boys (81.89%). Girls passed with 60% and above marks in primary and upper primary classes at national level is 44.94% and 40.67% respectively. The analysis above DISE data reveals that girl children education at elementary level in India is not satisfactory.

In case of Odisha state the promotion, repetition and drop out rate of girls in primary level is 64.2%, 14.3% and 21.6% respectively. The Gender Parity Index (GPI) of Odisha at primary level is 0.95 during 2007-08. Basing on access, infrastructure facility and teacher status the Educational Development Index (EDI) rank of Odisha state is 25, 26 and 25 respectively. (NUEPA-2010). The educational development index in access, infrastructure and teaching of Odisha for upper primary level during 2008-09 is 23, 27, 28 respectively. The outcome index ranking of Odisha among the 35 states and UTs as per EDI is 31 in India. The composite educational development index ranking of Odisha during 2008-09 is 27 for primary level, 29 for upper primary level and 28 for composite primary and upper primary level. (NUEPA-2010). The above analysis clearly indicates the status of girls' education in Odisha at elementary level is very miserable in composition to other states and UTs of India. So there is an urgent need of special focus on development of girls education in the context of achieving universalisation of elementary education in Odisha.

National Programme for Education of Girls at Elementary Level (NPEGEL)

The government of India has approved a new programme called National Programme for Education of Girls at Elementary Level as an amendment to the scheme of SSA for providing additional components for education of girls at elementary level. NPEGEL launched during November, 2003 to be implemented for progress of girls education in educationally backward blocks and SC/ST blocks. NPEGEL scheme further adds till upto the SSA mission by covering one of the most vulnerable as well as hard to reach target groups for achieving UEE the girls children in 6 to 14 years of age in all their varied categories i.e. never enrolled girls, drop out girls, working girls, adolescent girls, girls from marginalised social group, girls with low attendance & low level of achievement.

Objectives of NPEGEL

- To develop and promote facilities to provide access and to facilitate retention of girls and ensure greater participation of women and girls in the field of education.
- To improve quality of education through various interventions and to stress upon the relevance and quality of girls education for their improvement.

Focus of NPEGEL Under SSA

The focus of NPEGEL under SSA programme are as given below:

- ❖ To strengthen the capacity of district institution and organisation for planning, management and evaluation of girls education at the

elementary level and create a dynamic management structure that will be able to respond to the changes of girls education.

❖ To develop innovative gender sensitisation / training programmes with the assistance of concerned organisations and women's group, for teachers and administrators.

❖ To gear the entire education system to enhance self-esteem and self confidence of women and girls.

❖ To provide co-ordinated efforts, to ensure necessary support services to enhance girls participation and performance in elementary education.

❖ To build community support for girls education and a conducive environment for girls education in the school, community and home.

❖ To ensure that girls get good quality education at the elementary level.

Implementation Process of NPEGEL

District gender unit is administering the NPEGEL programme in the district. The unit consists of district gender co-ordinator, resource persons and supporting staff. The unit is co-ordinating and supervising all aspects of the components at district level and providing resource and training support. At block level the block resource centre co-ordinator is responsible for co-ordinating and converging with district gender unit and existing programmes. The core group at the block level responsible for community mobilisation, monitoring in the village progress for enrolment, dropout, achievement of girls, facilitating with VEC/MTA and creating an environment of girls education. At the cluster level the co-ordinators are appointed. The co-ordinaters are working along with the model cluster school. A cluster level committee is also formed for monitoring the cluster level activities. The committee is looking after the regular monitoring of girls enrolment, retention, check the drop out and enhance the achievement of level of girls in cognitive and non-cognitive area.

Activities Undertaken Under NPEGEL in Odisha

• Model cluster schools have opened for organising all NPEGEL programme activities.

• District level co-ordination committee, block level co-ordination committee and cluster level co-ordination committee have been formed to plan & organise the NPEGEL activities in all the districts of Odisha covered under NPEGEL.

• Teachers have undergone gender sensitivity teachers training to make school and classrooms girls friendly.

• Additional incentives in the shape of uniforms have been provided to all girls children of primary and upper primary schools.

• Sports equipments have been provided to all the NPEGEL clusters.

• Tele conference held through distance education to orient the field functionaries regarding NPEGEL scheme and programme implementation.

• Extra curricular activities specially for girls children have been conducted in all clusters.

• Remedial teaching centres for girls have been opened in all MCS Centres.

- Workshop has been organised to finalise list of Teaching Learning Elements (TLE) for MCS basing on the curriculum of primary and upper primary level.
- Zonal office is functioning at Rayagada to monitor and provide support for NPEGEL activities.
- Launching of JYOTI Magazine at MCS level, a girl friendly magazine with articles related to female protagonists to encourage girls.
- Residential camps for drop out and non-enrolled adolescent girls have been opened to equip them with four skills – literacy/numeracy, life skills, reproductive health information and vocational training.
- To make the girl children of school going age free from sibling case and enable them to attend school, early child care centres are being opened in unreserved areas and the existing ICDS centres are being strengthened.

Need of the Study

NPEGEL is an integral part of SSA programme specially concentrate on girls education through functioning of Model Cluster Centre School (MCS). This NPEGEL provides opportunities to the girls for achieving UEE. A lot of money is spent for implementing NPEGEL programme at block level in form of construction of MCS building, vocational training, organising awareness programme, talent search programme, organising sports and cultural activities in the schools, cluster level and block level. It is expected that the NPEGEL based educational programme will cater the need of such girls. Thus the study will help to know

the effectiveness of NPEGEL. It will be helpful to planners, educationist researchers, economists to formulate remedial measures for better achievement from the NPEGEL. Last but not least it will help to SSA authorities to know the strength and weakness of NPEGEL.

Objectives

- ❖ To find out the present status of various interventions of NPEGEL programme in tribal area.
- ❖ To critically examine the effects of NPEGEL programme on girls education at elementary level.
- ❖ To identify the strength and weakness of NPEGEL programme with regards to development of girls education.

Methodology

Descriptive survey method was followed for the research study.

Sample

Kalahandi district of Odisha had been taken as the area of the study. Out of 13 ITDA blocks of the district 4 blocks were selected for the study (i.e. 2 blocks were educationally developed and other two were fully tribal block. Out of total Model Cluster Schools (MCS) 40 MCS had been selected on random basis from different directions of the blocks. Besides this 8 feeder schools from 4 sample blocks had been included in the study. Moreover this study included 40 MCS co-ordinator,40 MCS centre headmaster, 8 feeder school headmasters, 48 teachers, 240 girls students, 88 VEC/MTA members, 20 cluster resource centre co-ordinator (CRCCs) 4 BRCCs. Random sampling method had been used for the selection of the sample of the study.

Tools Used

- ❖ School information schedule.
- ❖ Questionnaire for MCS Head teachers.
- ❖ Interview schedule for MCS centre co-ordinator.
- ❖ Interview schedule for teachers of MCS centre.
- ❖ Interview schedule for girls students.
- ❖ Interview schedule for VEC/MTA members.
- ❖ Interview schedule for BRCCs/ CRCCs.
- ❖ Format for Annual Test Result.

Procedure of Data Collection

Necessary data and information was collected in 4 phases. The first phase comprises to organise baseline study to select Block, Model Cluster Centre School (MCS) with the help of gender co-ordinator, BRCCs and CRCCs of the sample district. The second phase includes collection of data and information from headmaster through structured questionnaire and school information schedule. The third phases refers to collect necessary data and information from MCS co-ordinators, girls students, BRCCs and CRCCs, VEC/ MTA members and teachers through using structured interview schedule. The final phases comprises collect annual test result of Class – VI students for last five academic years from examination register. The duration of data collection was from 1st July 2010 to last week of November 2010.

Statistical Techniques Used

The data was tabulated and analysed keeping in view of the objectives of the study spelt out. The statistical technique of percentage, mean and chi-square (X^2) analysis were employed to analyse the collected data.

Result and Discussion

Basing on objectives some selected tabular and graphical representation has been given below.

Findings

Objective wise major findings are given below.

Table 1

Activities Undertaken under NPEGEL Programme for Development of Girls' Education

S. No.	Items	No. of Cluster			
		Satisfactory	Average	Poor	Total
1	Orientation for H.M, teachers and MCS co-ordinator	31 (77.50)	7 (17.50)	2 (5.00)	40 (100.00)
2	Functioning of Model Cluster School Centres	25 (62.50)	12 (30.00)	3 (7.50)	40 (100.00)
3	Utilisation of sports materials library book, cycle & TLE	22 (55.00)	13 (32.50)	5 (12.50)	40 (100.00)
4	Community Mobilisation programme	30 (75.00)	8 (20.00)	2 (5.00)	40 (100.00)

5	Early childhood care education	24 (60.00)	9 (22.50)	7 (17.50)	40 (100.00)
6	Alternative/bridge course	29 (72.50)	8 (20.00)	3 (7.50)	40 (100.00)
7	Remedial teaching	32 (80.00)	6 (15.00)	2 (5.00)	40 (100.00)
8	Additional incentive to girls	34 (85.50)	5 (12.50)	1 (2.50)	40 (100.00)
9	Vocational training	20 (50.00)	16 (40.00)	4 (10.00)	40 (100.00)

The analysis of Table – 1 reveals that under NPEGEL various activities were organised in different ways for qualitative development of girls education. About more than 50% schools were organised activities of NPEGEL satisfactory. It clearly reveals that status of activities of NPEGEL was satisfactory.

Table 2
Functioning Status MCS Centre in Developed and Backward

S. No.	Types of Blocks	Satisfactory	Less Satisfactory	Not at all Satisfactory	Total
1.	Backward Blocks	14 (70.00)	5 (25.00)	1 (5.00)	20 (100.00)
2.	Developed Blocks	11 (55.00)	7 (35.00)	2 (10.00)	20 (100.00)
	Total	25 (62.50)	12 (30.00)	3 (7.50)	40 (100.00)

The analysis of the Table – 2 clearly indicates that 70% MCS Centre of backward Block and 55% of Developed Blocks were functioning satisfactory. It further highlights that Model Cluster School Centres of backward block were functioning better than developed Block due to active initiative and guidance of BRCCs and CRCCs and active role of MCS centre Headmaster.

Table 3
**Role of MCS Centres Co-ordinators for
Development of Girls Education**

S. No.	Item	No. of respondents	Percentage
1	Undertaking survey work	42	9.54
2	Monitoring and co-ordinating the feeder schools of MCS centres	63	14.32
3	Functioning of Meena Club and Meena Mancha in schools	46	10.46
4	Collection of girls for new enrolment and mainstreaming dropout girls	48	10.91

5	Active participation awareness programme on importance of girls education	65	14.77
6	Taking class in absence of teachers in schools	29	6.59
7	Optimum use sports materials, TLM, cycle and library book for girls students	78	17.73
8	Active role in organising talent search, annual sports and cultural programme	69	15.68
	Total	440	100.00

It is revealed from the Table – 3 that MCS Co-ordinators were working satisfactory for success of NPEGEL. It again reflects that MCS Centre Co-ordinators were working for development of girls education in rural area.

The Chi-Square analysis of the table clearly concludes that role of MCS Centres co-ordinator is significant. Because the table value of X^2 for 7 degree of freedom at 5% and 1% level of significance is 14.067 and 18.475 which is less than the calculated value (i.e. 33.886). Thus MCS co-ordinator was significantly working for the development of girls education under NPEGEL.

Table 4

Participation of Girls in Curricular and Co-curricular Activities of NPEGEL

Sl. No.	Types of Participants	No. of respondents	Percentage
1	Fully	174	43.50
2	Average	122	30.50
3	Partially participated	66	16.50
4	Very poor participation	38	9.50
	Total	400	100.00

The analysis of Table — 4 reveals that about 54% girls were fully participated in classroom transaction and different activities of co-curricular activities after organisation of different activities under NPEGEL at elementary school level. The Chi-square (X^2) analysis further clearly states that this type of participation of girls in curricular and co-curricular activities in schools is significant. As the computed value i.e. 109.59 is higher than the table value for 3 degree of freedom at 5% and 1% level.

Table 5

Effects of NPEGEL Programme on Development of Girls Education

Sl. No.	Items	No. of responses	Percentage
1	It removes inequality between boys and girls in academic and non-academic area.	79	17.95
2	It enhanced active participation of girls in educational process.	58	13.19
3	Enhancement of quality of girls education at elementary school level.	69	15.69

4	Enrolment and retention rate of girls has increased.	77	17.50
5	It helps to enhance the community mobilisation and co-operation to MCS Centre.	41	9.32
6	Vocational competency has developed among girls.	33	7.50
7	Performance of girls is higher than boys in cognitive and non-cognitive area.	42	9.54
8	It encouraged the girls to use subject matter in daily life.	45	10.23
	Total	440	100.00

The analysis of the Table—5 clearly reveals that there was a positive effect of NPEGEL programme on girls education in tribal area with regard to quality of girls education, enrolment and retention rate of girls at elementary level, community participation for development of girls education, improvement of content knowledge among girls and bridge the gap of inequality between boys and girls in academic and non-academic activities of schools. The calculated value of X^2 (Chi-square) is 40.23 and which is more than the table value in 7 degree of freedom at both 5% and 1% level. So it clearly shows that all activities of NPEGEL had significant effects on girls education at elementary school level in tribal district.

Table 6

Strength of NPEGEL with Regard to Girls Education

Sl. No.	Items	No. of responses	Percentage
1	Increased enrolment and attendance rate of girls in schools.	102	23.19
2	Drop out rate had reduced to a great extent.	95	21.58
3	Higher achievement of girls in subject competency than boys	105	23.87
4	Active participation of girls in sports, talent search, cultural programme.	93	21.14
5	Develop vocational competency among girls.	45	10.22
	TOTAL	440	100.00

The analysis of Table—6 reveals that increased enrolment and attendance rate of girls, reduced drop out rate, better achievement of girls than boys in content subject, more participation of girls in sports, talent search & cultural programme and develop vocational competency among girls were the major achievement of NPEGEL in Odisha. The computed value of Chi-square is 27.34. It is higher than 5% and 1% level of table value at 4 degree of freedom. Thus all the strength items of NPEGEL are significant.

Table 7

**Strength of NPEGEL with
Regard to Girls Education**

Sl. No.	Items	No. of responses	Percentage
1	Utilisation of NPEGEL funds	107	24.31
2	Poor monitoring and supervision work at state, district and block level.	112	25.45
3	Poor orientation to MCS, Co-ordinator, remedial teacher and part-time teachers on NPEGEL programme.	66	15.00
4	Feeder schools of MCS Centres get less opportunity for NPEGEL programme.	3	21.13
5	Lack of co-ordination and co-operation among MCS Centre Head master, SSA personnel and community members.	62	14.09
	TOTAL	440	100.00

The analysis of the Table—7 reveals that poor monitoring and supervision work at state, district and block level, less utilisation of NPEGEL funds, poor status orientation to MCS Centre Co-ordinator, Head Master on NPEGEL, less opportunities to feeder schools of MCS major Centre and insufficient coordinator MCS Centre, SSA personnel were the weakness factor of NPEGEL in Odisha. The Chi-Square analysis clearly highlights that all these identified factors relating to problems of NPEGEL were significantly affected unfavourable on girls education in tribal area. Because the calculated value of Chi-square is 24.1 which is more than the table value of Chi-square at 5% and 1% level.

Table 8

Inter–related Factors and NPEGEL Affected Girls Education

Sl. No.	Dimensions	Observed range score	Mean value	No. of cluster above the mean	No. of cluster below the mean
1	Organisation of NPEGEL activities	8-40	3.6	26	14
2	Community mobilisation work	6-30	3.5	29	11
3	Utilisation of NPEGEL funds	7-35	3.0	23	17
4	Infrastructure facility	6-30	3.3	28	12
5	Functioning of MCS Centre	8-40	3.8	32	8
6	Monitoring and supervising work	7-35	2.8	27	13

The above Table – 8 is based on the five point rating scale observation schedule. The table reveals that more than 50% interventions of NPEGEL were organised satisfactory. The analysis further clearly point out that effect of NPEGEL was positive on girls education in tribal district of Odisha. For clear understanding about impact of NPEGEL is given in diagrammatical representation as per the mean value and observe value.
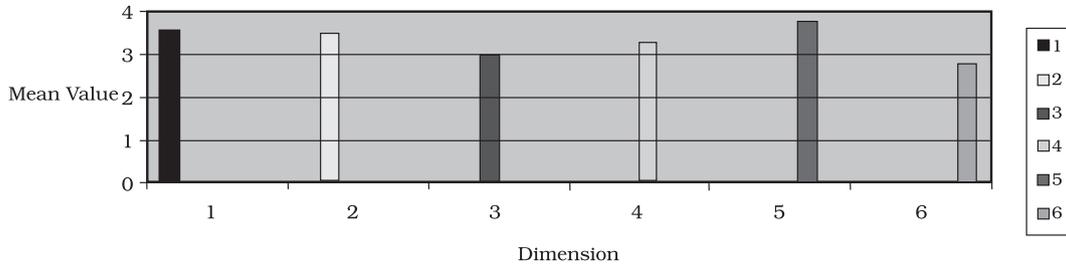
Fig-1: Status of Different Interventions of NPEGEL

Table 9

Steps to be Taken for Higher Achievement from NPEGEL

Sl. No.	Suggested Items	No. of respondents	Percentage
1.	Special orientation should be imparted by competent institution on NPEGEL.	85	19.31
2.	Steps must be taken for 100% utilisation of NPEGEL funds.	112	25.45
3.	Regular monitoring and supervision of NPEGEL activities by monitoring team.	108	22.28
4.	Community mobilisation programme should be organised on regular basis.	67	17.50
5.	Status of MCS coordinator, remedial teachers and part time teachers should be enhanced by better remuneration and term of appointment.	68	15.46
	TOTAL	440	100.00

It is revealed from the Table— 9 that special orientation to MCS co-ordinator, Headmaster, part time and remedial teachers, maximum utilisation of NPEGEL funds, regular monitory and supervision work, community mobilisation, enhancement of service status of NPEGEL staff of the district are major action orientation strategies for better effectiveness of NPEGEL on girls education in tribal area.

As the comported value of Chi-Square (x^2) is 29.14 which is more than the table value for 4 degree of freedom at 5% and 1% level of significance. So these factors are significant for better implementation of NPEGEL in tribal district of Odisha.

• Through various activities of NPEGEL (National Programme on Education for Girls at Elementary Level) various programmes such as orientation to Headmaster, MCS Co-ordinator and teachers, functioning MCS centre, use of library book, sports materials, TLE, bicycle etc, mobilisation of community for girls education, early childhood care education, bridge course for girls, remedial teaching, supply of additional initiates to girls and schools and vocational training

were organised satisfactory in more than 50% model cluster school centres with regards to girls education.

- About 70% model cluster school centre of backward block and 55% of developed block were functioning satisfactory. So MCS centres, of backward blocks were functioning better than developed blocks of Kalahandi district of Odisha due to active initiatives and guidance of BRCCs, CRCCs and active role of Headmaster of MCS Centres.
- Role of MCS Centre co-ordinator was significant with respect to for development girls education in tribal area of Odisha.
- More than 43% girls were fully participated in both curricular and co-curricular activities of the NPEGEL.
- There was a positive impact of NPEGEL programme on girls education at elementary level with regards to increasing enrolment, retention rate, improvement of achievement rate in academic and non academic activities of schools.
- Increased attendance and retention rate, reduced drop out rate, acquired better achievement of girls than boys in content knowledge, active participation of girls in sports, talent search and cultural activities and develop vocational competency among girls were major strength of NPEGEL.
- Poor monitoring and supervision of NPEGEL activities at state, district and block level, less utilisation of NPEGEL funds, poor status of

orientation programme, less opportunities to feeder schools of MCS centre, insufficient coordination among MCS centres, BRCCs, CRCCs, gender coordinator and VEC/MTA members were the major weaknesses of NPEGEL programmes in tribal district of Odisha.

- Interventions for NPEGEL was significant effect on development of girls education at elementary level in tribal area.
- Special orientation programme on NPEGEL, steps for 100% utilisation of NPEGEL funds, regular monitoring and supervision of NPEGEL related activities, mobilisation of community members and capacity building of MCS coordinator part time teacher remedial teachers and community members were urgently needed for systematic organisation of NPEGEL for development of girls' education in tribal area.

Conclusion

In the light of the findings of the study it concludes that status of various interventions of National Programme for Education of Girls at Elementary Level (NPEGEL) was satisfactory with respect to functioning of Model Cluster School Centres (MCS), providing additional incentives to girls students, remedial teaching, programme of orientation, work of MCS co-ordinator, part time teachers, organised cultural programme, community mobilisation programme, bridge course, imparting vocational training and utilisation of sports materials, library book, cycle and TLE. There were a positive effects/impact of

NPEGEL on development of education among girls at elementary level in tribal district of Odisha. But monitoring and supervision work and maximum utilisation of NPEGEL funds should be prior objective of SSA authorities of Odisha for getting higher achievement from NPEGEL in tribal area, of Odisha.

Suggestion

- Awareness programme on NPEGEL should be organised at village, block and district level on regular basis.
- Resourceful monitoring team should be constituted under the leadership of principal of DIET for effective monitoring and supervision work of NPEGEL activities.
- Special orientation should be given to headmasters of MCS centre, BRCCs, CRCCs, MCS Centre co-ordinator and teachers for maximum utilisation of NPEGEL funds in fruitful way.
- Higher remuneration and full time engagement should be given to MCS centre co-ordinator for better success of NPEGEL in tribal area.

Educational Implication

- The study will helpful to authorities like DPC, gender co-ordinator, BRCCs, CRCCs and Headmaster of MCS centre to take appropriate steps for effective implementation of NPEGEL programme.
- The findings of the study will also helpful to the planner, researcher, educationist, NGOs to work actively for development of education among girls at elementary stage in tribal area.

REFERENCE

AGRAWAL, G. 2000. *Girls and Women Education, Development and Planning of Modern Education,* New Delhi, Vishwa Prakashan.

BEHERA, G.G. 2006. *Women Education in KBK Region,* UGC Sponsored Seminar on Women Education in KBK District of Odisha, Govt. Women's College, Bhawanipatna.

DAS, M.K. 2008. *Evaluation of Participation of Model Cluster School Co-ordinators for Promotion of Girls Education in Nuapada District*, SSA, OPEPA, Bhubaneswar.

GOVERNMENT OF INDIA. 1997. *Improving Girls Access to a Better Life through Primary Education*, DPEP calling, MHRD, New Delhi.

GOVERNMENT OF ODISHA. 2003. *Vision 2020, An Agenda for School and Mass Education, Report of the Task Force*, Department of School and Mass Education, Bhubaneswar.

KRISHNAMACHARYULU, V. 2006. *Elementary Education, Volume–I & II.* Neelakamal Publication Pvt. Ltd., New Delhi.

NCERT. 2002. *Issues of Primary Education*, Educational Consultants India Ltd. MHRD, Government of India, New Delhi.

NCERT. 2005. *National Curriculum Framework– 2005*, NCERT, New Delhi.

NUEPA. 2010. *Elementary Education in India, Progress Towards UEE*. NUEPA, New Delhi.

OPEPA. 2006. *Guideline for NPEGEL Programme, Department of Girls Education*, State Project Office, SSA, Bhubaneswar.

RAO, B.K. 2007. *Women and Education*, Kalpaz Publication, Delhi.

RAO, D.B. 1998. *District Primary Education Programme*, Discovery Publishing House, New Delhi.

ROUL, K. 2010. *An Evaluation of Functioning of Model Cluster school centres for development of Girls Education in Kalahandi District*, State Project Office, SSA, OPEPA, Bhubaneswar.

RUSTAGI, P. 2009. *Concerns, Conflicts and Cohesions, Universalisation of Elementary Education in India*, Institute of Human Development, New Delhi.

SRIVASTAVA, G. 1996. *Parents and Teacher's Perceptions of Gender–related Issues for Improving Access, Enrollment, Retention and Achievement of Girls at Primary Stage.* NCERT, New Delhi.

UNESCO. 2008. *Education for All by 2015 : Will We Make It ?* EFA Global Monitoring Report, Paris.

Strategies of Classroom Transaction of Science at Upper Primary Level in the Light of NCF-2005

Ravindra Kumar Parashar*
Vikramjit Singh**

Abstract

The present paper highlights the research findings on the strategies of classroom transaction at upper primary level of science in the light of NCF-2005. Further it aimed to identify the students' co-perception towards classroom transaction of science at upper primary level in the light of NCF-2005.

School education has been periodically passing through different curricular and other reforms since independence. National Council of Educational Research and Training (NCERT) is an apex body which has always played an important role in this reforms and activities. Recently the council has brought out the National Curriculum Framework (NCF)-2005 with wide discussion and debates adding to the series of earlier Curriculum Framework, i.e., 1975, 1988, 2000. The guiding principles that NCF 2005 highlighted are:

- Connecting knowledge to life outside the school,
- Ensuring that learning is shifted away from rote method,
- Enriching the curriculum to provide for overall development of children rather than remain textbook centric
- Making examinations more flexible and integrated into classroom life and
- Nurturing and overriding identity informed by caring concerns within the democratic polity of the country.

NCF emphasises on giving primary to child's voices and questions in the

 * *Associate Professor*, DESM, NCERT, New Delhi.
** *UGC Research Scholar*, DE, RIE (NCERT), Bhubaneswar.

classroom and also advices teaches to connect child's day-to-day experiences with school knowledge simultaneoulsy integrating assessment with classroom learning. Keeping all the above guiding principles of curriculum development in view, NCF-2005 proposes significant changes in curricular areas. With regard to teaching of Science the document states that Science is a dyanamic, expanding body of knowledge, covering ever-new domains of experience. In a progressive forward–looking society, Science can play a truly liberating role, helping people escape from the vicious cycle of poverty, ignorance and superstition. Good science education is true to the child , true to life and true to sciences. The document elaborates upon basic criteria of validity of science curriculum i.e., cognitive validity, content validity, process validity, historical validity, environmental validity and ethical validity. NCF-2005 recommended that teaching of science should be recast so that it enables children to examine and analyse everyday experiences.

Concerns and issues pertaining to the environment should be emphasised in every subject and through a wide range of activities involving outdoor project work. Some of the information and understanding flowing from such projects could contribute to the elaboration of a publicly accessible, transparent database on India's environment, which would in turn become a most valuable educational resource. If well planned, many of these student projects could lead to knowledge generation. A social movement along the lines of Children's Science Congress should be visualised in order to promote discovery learning across the nation and eventually throughout South Asia.

The NCF-2005 recommends that in our classrooms the traditional teacher dominated 55 read and remember till asked   practice has to be replaced by pupil-centred, activity centred teaching learning process. Children will learn only in an atmosphere where they feel they are valued. Our schools still do not convey this to *all* children.

The association of learning with fear, discipline and stress has to be replaced with enjoyment and satisfaction for the real learning. The students should be provided with necessary resources, guidance, strategies, time and freedom so that they can enhance their own knowledge in the right manner. The document also emphasised upon the need of appropriate infrastructural facilities for a school. In fact, the structuring of infrastructural facilities is essential for paving the way for creating a learner–friendly and activity–centric context. Setting norms and standards, especially relating to space, building and furniture would help in fostering a discerning sense of quality. The document categorically emphasises that classroom learning be connected to outside school experiences and provide enough opportunities for students to go beyond the textbook. For this purpose the students ought to be encouraged to learn from each other, from environment, take up relevant activities, critically analyse and ask questions and try to find answers of them. The methodology of student evaluation should also change according to this situation.

The new development by the NCERT for all the stages of school education in all subject areas are in tune with the perspective of the NCF-2005 new syllabi and textbook. The textbooks of upper primary classes (VI-VIII) have been designed innovatively keeping in view the underpinings of child-centred pedagogy.

These learning materials are interactive and have been developed around the experiences of children. A number of activities have been given in the text-books which are to be performed by the students individually or in groups. Burden of the information has been reduced and ample opportunities have been provided in the textbooks to go beyond the classroom.

The teachers around the country have been oriented on NCF-2005 through the different programs organised by NCERT. The new textbooks are now being used by the teachers in the schools. They have to be used by the teachers and the students according to the recommendations of NCF-2005. The effectiveness of the recommendations of NCF-2005 can be wholly achieved if its objectives of teaching science can be transacted in the actual classroom situation while teaching these subjects. The students' acceptance and perception to the new curricula also guarantees the success of the new curricula. The role of the teacher in the modern classroom has to be also understood and taken care of while transaction of the new curriculum. It is henceforth be very interesting to study as to what extent the teachers and students are adopting these changes made in the textbooks and its transaction and what are the difficulties they face in adopting them. The present study is an attempt to study these aspects.

Objectives of the study

The objectives of the study are the following:

i. to find out sateges of the infrastructural facilities available for classroom transaction in the light of NCF-2005 at upper primary level.

ii. to study the learning strategies adopted for classroom transaction of science textbooks in the light of NCF-2005 at upper primary level.

iii. to identify students perception towards classroom transaction of science textbooks in the light of NCF-2005 at upper primary level.

Methodology

Sample: Three states of eastern region i.e. Jharkhand, Odisha and West Bengal are selected for the study and for the administration of the tools. The selection of schools was made through purposive random sampling method. All selected school are affiliated to CBSE, New Delhi and follows NCERT textbooks.

The details of the sample are as below:

Table 1
State wise Selection of Schools in Urban and Rural Setup

Odisha–3 Schools, Urban(3)	Jharkhand-5 Schools, Rural(2), Urban(3)	West Bengal-2 Schools Rural(1), Urban(1)

Tools: Four measuring tools in the form observation schedule were prepared for measuring the different dimensions of the infrastructural facilities available at upper primary level as well as for measuring transaction strategies of science students response of transactional facilities at upper primary level. The tools were prepared by the experts and resource persons in a workshop organised at NCERT, New Delhi from June 20-24, 2008. The description of the observation schedule is as follows:

i. *School facilities:* A performa containing columns for information about different facility available was developed. It gave information about library, laboratory, ICT facilities, demonstration kits, science clubs, science park, school garden, etc. available in school.

ii. *Classroom Facilitation:* Information about facilitation for instruction available in classroom was collected in the Performa as Yes or No. Information was collected on sufficiency and flexibility of seating arrangements availability of ICT facility in classroom, availability of science corner, visibility of black board, proper lighting, ventilation and availability of space for demonstration and bulletin board/ display board.

iii. *Classroom Transaction:* The investigators recorded observations in classroom about the introduction of the content, interaction in classroom, performance of activity for learning facilitation, evaluation methods and lab skills. The investigators recorded the observations YES/NO/NA and noted some remarks for making qualitative judgement.

iv. *Student's Response:* A questionnaire was developed in writing response in YES/NO/NA. The purpose of this was to involve the students and to take their view regarding the transaction of the Science contents in the classes.

Findings

The data was collected under the above four aspects namely school facilities, classroom facilities, classroom transaction and students response for the classroom transaction. The findings are as follows:

School facilities: School facilities include information about library, laboratory, ICT facilities, demonstration kits, science park and school garden. The findings showed that seating capacity of school in the library are adequate both in rural and urban setup. All the schools in urban areas possessed more than

Table 2
School Infrastructural Information at Upper Primary Stage in terms of Rural, Urban and Total Percentage (N-Schools Observed)

School Facilities	Rural (%),N=3	Urban (%),N=7	Total (%),N=10
Library			
Seating capacity in library (40 or more)	100	100	100
No. of books (5000 or more)	66.66	100	90

Adequacy of no. of magazines (more than 16)	66.66	100	90
No. of newspapers (5 or more)	66.66	71.42	70
Adequacy of periods allotted for upper primary classes	100	100	100
Issue of books to students	100	100	100
Laboratory			
Upper primary science lab	66.66	57.14	60
Upper primary maths lab	33.33	100	80
ICT facilities			
Adequate no. of computers (more than 20)	66.66	85.71	100
Overhead projector	33.33	85.71	70
LCD projector	66.66	85.72	80
TV/CD/DVD player	100	100	100
Demonstration kits			
For science	100	100	100
For maths	100	100	100
Clubs			
Science club	66.66	57.14	60
Maths club	66.66	71.42	70
Science park	0	0	0
School garden	66.66	100	90

5000 books whereas only 66.66% schools in the rural area are having more than 5000 books. 66.66% schools in rural setup and 71.42% schools in the urban setup are availing more than 5 newspapers daily. It is observed that total 60% of the schools (66.66% of rural and 57.14% of urban setup) have upper primary science lab whereas 85.71% of the urban schools are having adequate ICT facilities. Although there are some schools having science club in the schools, there is no school having Science Park. The results can be summarised in Table 2.

Classroom facilities: Classroom facilities included information on sufficiency and flexibility of seating arrangements, availability of ICT facility in classroom, availability of science and mathematics corner, visibility of black board, proper lighting, ventilation and availability of space for demonstration and bulletin board/display board. The findings indicates that there are adequate seating arrangement, flexibility of seating arrangement, visibility on blackboard and proper light and ventilation in the classroom at upper primary stage.

Table 3
Classroom Facilities at Upper Primary Stage in terms of Rural, Urban and Total Percentage (N=Classroom Observed)

Classroom Facilities	Rural (%),N=103	Urban (%),N=83	Total (%),N=186
CF.1. Adequate seating arrangement	89.33	100	74.80
CF.2. Flexibility of seating arrangement	65	98.80	63.70

CF.3. ICT facility in the classroom	0	2.4	0.9
CF.4. Science and Maths corners available	0	1.2	0.4
CF.5. Visibility on blackboard	96.11	98.8	77.44
CF.6. Bulletin board/Display board	46.66	97.6	55.10
CF.7. Proper lighting	91.33	100	75.60
CF.8. Proper ventilation	91.33	100	75.60
CF.9. Space availability for demonstration/group activity	71.80	100	67.10

ICT facilities and science corners in the classrooms are not available in mostly schools. Classrooms of 46.66% of rural schools and 97.66% of urban schools have bulletin board/display board facility. All the urban school classrooms and 71.84% classrooms of rural schools have space available for demonstration. The above findings can be more clearly understood by Table 3 and Fig. 1.
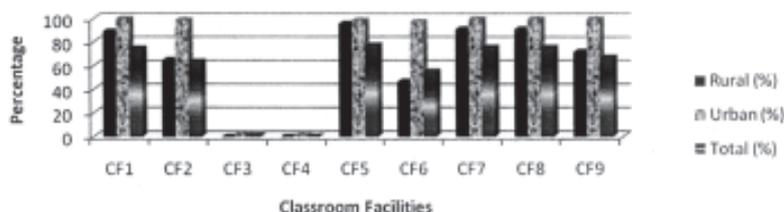

Fig. 1: Classroom facilities at upper primary stage in rural and urban setup

Classroom transaction: The findings regarding the classroom transaction procedures have been divided under the six heads relating to introducing the lesson, interaction with learners, learning facilitation, activity performed during class, assessment techniques and laboratory skills of learners. These all phases of classroom transaction were seen according to the recommendations of NCF-2005 document. It is found that the introduction of the lesson is done almost appropriately in the urban schools than their counterpart.
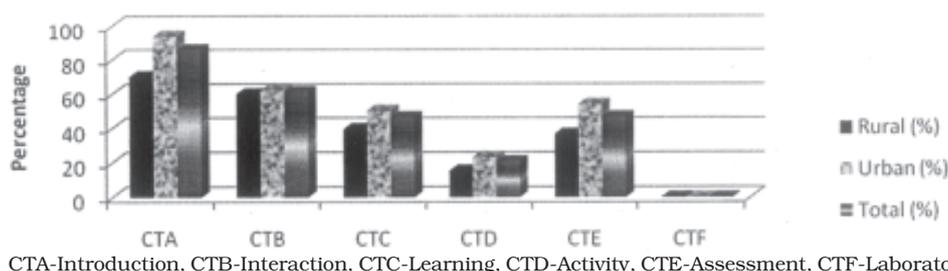
Table 4
**Strategies of Classroom Transaction in Science at
Upper Primary Stage in Rural and Urban Setup**

Transactional Facilities	Rural			Urban			Total		
	1	2	3	1	2	3	1	2	3
CTA(Introduction)	83	104	79.8	106	128	82.8	189	232	81.5
CTB(Interaction)	186	270	68.9	224	322	69.6	410	592	69.3
CTC(Learning)	138	342	40.4	285	564	53.4	423	876	48.3
CTD(Activity)	9	65	13.9	57	175	32.6	66	240	27.5
CTE(Assessment)	77	188	41	137	274	50	214	462	46.3
CTF(Laboratory Skills)	0	0	0	0	0	0	0	0	0

1. No. of observation that has followed the transaction strategy.
2. Total No. of observation
3. Percentage of observation that has followed the transaction strategy

It is very disheartening to find that the interaction procedure is not followed systematically in the upper primary schools. Learning facilities are also lacking behind the recommended level and the teacher themselves are giving observation, generalisation and conclusion from the activities being conducted. Table 4 and Fig. 2 show the information regarding classroom transaction in science.

CTA-Introduction, CTB-Interaction, CTC-Learning, CTD-Activity, CTE-Assessment, CTF-Laboratory

Fig. 2: Strategies of classroom transaction in science at upper primary stage in rural and urban setup

The teachers are neither altering their strategies to address the students need nor are the ICT facilities used during the classes. NCF-2005 has very significantly highlighted the importance of activities in the science classroom and NCERT has written the lessons in science textbooks totally activity oriented so as to harness the recommendations of NCF-2005 document. From the present study it is noticed that there is hardly any activities in the classrooms. The techniques of assessment in the schools are not very appropriate in the upper primary level in both the rural and urban setup. The teachers in both rural and urban schools made little or no use of ICT facilities to assess the learners. Neither the teachers are using open-ended questions in the class nor are the assessments done to identify the strength and weakness of learners. The students at the upper primary stage in both rural and urban schools were not trained in laboratory skills.

Students' response: The perception of students towards the modern transaction strategies is found to be quite satisfactory. The students were given freedom to ask questions, express their ideas, allowed to work in groups. Students are given time to prepare posters and models in the classroom. It has been also found that students' ideas are attended too and are given adequate space to interpret reasons for unexpected results. It is observed that opportunities for performing experiments individually are insufficient in both rural and urban schools at upper primary stage. Again very small percentages of classes are held outside the classroom, and are found to be more in rural schools. Making observation, recording and demonstration of activities are also not of the students' satisfaction level. It is very satisfactory that students are given chance to explore reasons for the unexpected results. The results have been summarised in Table 5.

Table 5

Students' Perception towards Classroom Transaction Strategies in Science at Upper Primary Level in Terms of Rural, Urban and Total Percentage

Response items for students	Rural (%)	Urban(%)	Total(%)
Freedom for asking question	87.70	93.10	90.70
Freedom for expression of ideas and views	83.30	96	90.60
Regularity of group activities	83	88.20	93.10
Discussion of topic with friend	78	90	90.80
Chance of performing experiments in groups	63.40	58.70	82.80
Chance of performing experiments individually	62.50	70.40	84.10
Collection of information from other sources (Internet, Newspaper)	75.50	70.40	72.80
Preparation of poster/model activities	64.30	66.70	65.60
Making note of the activities	80.80	88.20	85
Freedom of self conclusion on the observation of activities	80.80	89.90	86
Frequency of not agreeing to teachers and to speak of own view	87.70	80.30	83.90
Teacher listening to students saying	88.30	81	84.60
Teacher responding to students saying	89.80	68	94.60
Frequency of organising the classes outside the regular setup	20	18.20	18.80
Use of science/mathematics textbooks during classes	55.60	54.80	55.10
Teacher teaching methods of remembering terms and formulae	20	21.40	20.80
Freedom of solving problem and proving theorem in different ways	29.40	27.30	28.20
Teacher demonstrating activities	64.30	56.80	60.50
Freedom of conducting experiments individually	61.50	50	55.80
Frequency of observing and recording of experiments	46.70	51.30	49.30
Students making measurements themselves	46.70	48.70	47.80
Freedom of drawing conclusion by students	46.70	51.30	49.30
Freedom for exploring the reasons for unexpected results	98.40	88.10	99.20

Conclusion

NCF-2005 is a reflective document of what should be our education system in the future. It has reflected upon the different curricular areas as well as on the strategies to achieve them too. It has stressed upon the pedagogical aspects of different curricular content areas and transaction strategies. Accordingly, new textbooks have been written. The government has henceforth taken enormous efforts to train the teacher about the new transaction methods for the new textbooks. It has organised different in-service programs as well as orientation programs to acquaint the teachers to the new methodology of teaching and learning in science.

Without the effective knowledge of Science the students will surely not perform better in their future life. Modern approach of Science education demands more active participation than the traditional system. The modern learners are now not mere passive listener in the class but are eager to participate in each and every step of learning.

The above study has shown the current situation of classroom practices of Science in the eastern region of our country at upper primary level. Although we have been able to address some of the demands of new education system yet much is to be done. The emphasis of more and more activity centred classroom has to be taken care of. The classroom is to be made ICT equipped and it should be used to assess the students as well as to diagnose students' problems in learning. We are living in the world of science and technology,thus the students must be given chance to explore these areas and use the internet and communication technology in the process of learning Science. Science park, science corners in the schools have to be opened in more number. The concept should be explained to the students by organising

more activities involving, interacting with students and generalisation should be done with the help of students. Students should also be given chances of inter-relating the facts to their day to day life situation. The teacher should also be always ready to alter their instructional strategies to address students' individual needs and requirements. The students must be acquainted through laboratory skills at the very best of their knowledge and also given more freedom for the conduction of experiments, observation of experiment and drawing conclusions individually.

As it is well known statement that the 'destiny of a nation is shaped in its classroom' (Education Commission 1964-66), the implementation of the recommended strategies of NCF-2005 will surely help for the development and progress of the students-the future citizens of our country. We have a dream of modern educated and technologically equipped young mass of students and our teachers are having the task in their hands in determining the success of this dream and for the progress of our future citizens for the development of our nation.

REFERENCES

BEST, J.W.1999. *Research in Education.* New Delhi: PHI Pvt. Ltd.

GARRET, H.E. & Woodworth, R.S.2006. *Statistics in Psychology and Education,* New Delhi: Surjit Publication.

GAY, L.R. & Airasian, P.2000. *Educational research: competencies for analysis and application.* New Jersey: Prentice Hall International.

NCERT.1993. *"Learning without Burden",* New Delhi.

NCERT.2004. *"Instructional Objectives of School Subjects",* New Delhi

NCERT.2005. "*National Curriculum Framework-2005*", New Delhi.

NCERT.2006. *Position Paper: National Focus group on Teaching of Mathematics,* New Delhi.

NCERT.2006. *Position Paper: National Focus group on Teaching of Science,* New Delhi.

NCERT.2008. *Executive Summary of National Focus groups position papers,* New Delhi.

Phenomenological Primitives and Learning of Science

K. M. Rᴀᴊᴀɴ*

Abstract

Phenomenological primitives play a vital role in learning Science. Phenomenological primitives are primitive notions which stand without significant explanatory substructure or justification. Phenomenology makes a distinction between appearance and essence. Phenomenology is the study of essence. Phenomenology deals with question of what is the nature or meaning of something. This is different from naïve conceptions and prior knowledge. Naïve conceptions develop before students experience formal study of Science. Prior knowledge is a combination of both knowledge and skills accumulated from previous experiences. However, phenomenological primitives may facilitate, interact or obstruct new learning. The aim of the present study was to shed some light on the phenomenological primitives of 11-year old students, more specifically on the concepts related to light, electricity, mass, weight and solutions. A 10-item two-tier multiple choice test was developed and administered to 414 sixth grade students of twelve schools. These schools included government, aided and unaided schools located in rural and urban areas. A few selected students were interviewed to understand their explanations of the reasoning. The results indicated that sixth grade students among several other p-prims hold that energy is associated with moving objects only. Since children's existing ideas have a major influence on learning, it is necessary that the teacher should be sensitive to his or her pupil's ideas. If teachers are aware of some possible views held by children at various age levels, then they can device appropriate methods to deal with different views held by their pupils.

Phenomenology

Phenomenological primitives are primitive notions which stand without significant explanatory substructure or justification (disessa, 1983). Phenomenological primitives (p- prims in short) can be understood as simple abstractions which are taken as

---

* *Principal*, St. Joseph's Training College, Mannanam, Kottayam District, Kerala 686 561

relatively primitive in the sense that they generally need no explanation (disessa, 1988). The Phenomenological primitives are encoded as an expected event and are relatively independent of the context. The primitives (like axioms) are at the root of many explanations and justifications. The p-prims are notions not necessarily of specific experiential base. For example, an object (not seen before) made of iron may be heavier or lighter depending on the amount of metal used in its molding. However, there is a notion about its weight even in the absence of a direct prior experience with the object.

Phenomenology makes a distinction between appearance and essence. Phenomenology is the study of essence. The "essence" is derived from the Greek *ousia,* which means the inner essential nature of a thing, the true being of a thing. Essence is that what makes a thing what it is (and without which it would not be what it is). Notion of essence is highly complex and is not a single, fixed property by which people know something; rather, its meaning constituted by a complex array of aspects, properties, and qualities – some or which are incidental and some of which are more critical to the being of things.

Phenomenology deals with question of what is the nature or meaning of something. Phenomenology does not produce empirical or theoretical observations or accounts. Phenomenological primitives are different from naïve conceptions and prior knowledge. There is general vagueness or lack of precision in the definition of these terms in the literature. If there is a lack of precision in the way

that researchers articulate the construct, it will be reflected in the way questions are asked, and measures are developed. Therefore, it is important to develop a precise definition of naïve conceptions and prior knowledge so to have a clear understanding about the phenomenological primitives. The following sections will elaborate the terms naïve conceptions and prior knowledge as used in this paper.

Naïve Conceptions

Pupils have naïve conceptions (descriptive and explanatory systems) for scientific phenomena that develop before they experience formal study of science. Naïve conceptions that students bring with them to the classroom are persistent. Naïve theories and the distortions they engender in students' comprehension are among the principal causes of students' failure to achieve understanding in science (Champagne, Gunstone & Klopfer, 1983).

The naïve propositions such as - 'heavier objects fall faster than lighter ones' - is common among learners. This is generalised from their experience that stones fall faster than leaves. However, the 'contaminated' form as - ' heavier objects fall faster than lighter ones because gravity pulls harder on heavier objects' - is the result of information learned in science that is inappropriately liked to an existing naïve conception (Champagne, Gunstone & Klopfer, 1983).

Prior Knowledge

Prior knowledge may be defined as a combination of knowledge and skills accumulated from previous experiences (Hewson, 1986). However, there is an abundance of terminology used by

researchers to refer to what seems to be the same construct – prior knowledge. These include background knowledge, pre-existing knowledge, previous knowledge and existing knowledge. In this paper prior knowledge is used to mean all these terms. The term prior knowledge denotes that the knowledge is based on some experience and not notions of reality. Prior knowledge exists not only at the level of "concepts," but also at the levels of perception, focus of attention, procedural skills and modes of reasoning.

Prior knowledge affects how students interpret instruction. It may not prevent them from carrying out procedures correctly but, it frequently leads to unconventional and unacceptable explanations. Prior knowledge is active at levels ranging from perception to conception. A large body of findings shows that learning proceeds primarily from prior knowledge and only secondarily from the presented materials. Prior knowledge can be at odds with the presented material and consequently, learners will distort presented material. Neglect of prior knowledge can result in students learning something opposed to the teacher's intentions, no matter how well those intentions are executed in instruction. To help people make the most of a new experience, educators need to understand how prior knowledge affects learning. To the child who does not yet understand heat and temperature, no quick explanation can possibly resolve the contradiction between the hot desert and the warm wool; it takes weeks to years for this understanding to emerge (Lewis, 1991).

Learning of Science

Phenomenological primitives serve a variety of cognitive functions such as heuristic cues and analyses in knowing. P-prims like 'intuitive scientific knowledge' can be highly useful despite its intrinsic limitations of precision, accuracy and coherent generality (Reif, 1987). Phenomenological primitives that students bring to class have a major impact on developing an understanding of concepts consistent with those of scientists. Teachers of science must recognise that the existing p-prims often interfere with the concepts being developed in classrooms. To develop a foundation of concepts that will allow students to develop similar understanding to chemists, students must restructure their current understanding. Teachers must recognise the importance of students' expression of their ideas and understandings to explain phenomena, even if these differ from scientists. For this to occur teacher will have to undergo a process of conceptual change, a restructuring of their views of teaching.

Retrieval and Processing of Information

The retrieval and processing of phenomenological primitives are comparable to that of the formal concept interpretations (Reif, 1987) though not identical. The operation of p-prim involves: (1) natural retrieval of p-prims and (2) devising a use of the p-prim to identify or reason in the context of a particular instance. Specifics of the situation provide a notion that has no sound or experiential base. For example, springiness is not occurring to the mind

of a student when seeing a bouncing ball. A person resists to see a bouncing ball as a spring. How could one convince that one should do so? The person argues that harder objects such as ball bearings bounce so well. Therefore, what is expected to see in an instance is not seen by a learner whereas another learner sees it so quickly.

Students reading a science text or listening to a science teacher must gain understanding by relating what they are reading (hearing) to what they know, and this require active, constructive work (Carey, 1986; Rajan, 2010). Scientific understanding cannot be affected without grasping the depth and tenacity of the student's pre-existing knowledge (Carey, 1986). This is true in the case of phenomenological primitives also.

Learning Difficulties

New learning is intertwined to what already exists in the learner's cognitive structure. Learners are more likely to construct an interpretation that agrees with their p-prims/naïve conceptions/ prior knowledge. Learners hold a wide range of ideas about many scientific topics that often contradict the science that they will learn in schools. Teachers should not assume that their students will come to classes without any perceived ideas about a topic. The nature of learners ideas vary across a number of dimensions. Some of the ideas appear to be quite specific, while others are more general. Some times learner's ideas are easily labile but others are very stable. Certain conceptions seem to disappear rapidly under the effect of teaching. For example, many beginners who are asked to light a bulb using a battery and wires

consider that a single wire is enough to carry the current from the battery to the bulb, without the circuit needing to be closed with another wire. But this conception disappears with a single encounter with the topic (Dupin & Joshua, 1987).

The overwhelming weight of evidence has forced informed educators to fundamentally change the way science is taught. Traditionally, it has been assumed that the knowledge (p-prims, naïve conceptions, prior knowledge) that students already possess will facilitate further learning (Champagne, Gunstone & Klopfer, 1983). Emphasis was on the role of facilitative function (positive transfer) of these in learning. That is, the facilitating effect of knowing something on learning a new concept. Recent research has revealed that students' p-prims interfere with, rather than enhance learning. This has raised a new problem of identifying and confronting (if needed) with p-prims so that science knowledge presented in the instruction can be successfully learned and applied.

Learning difficulties may cause due to : (1) a knowledge base including p-prims that is fragmented and incoherent and (2) an inability to apply knowledge appropriately after it has been retrieved (Labudde, Reif & Quinn, 1988). Scientific concepts are usually introduced by verbal and mathematical definitions. For example, Boyle's law is introduced in its mathematical form, that is, Pressure (P) is inversely proportional to Volume (V) at constant Temperature. Concepts are often introduced without taking into account students' p-prims, and without having students adequately compare and contrast unfamiliar scientific pre-

existing notions. Adequate comparison of p-prim with presented knowledge is warranted for effective learning or restructuring of knowledge.

Role of a Science Teacher

A science teacher should be a diagnostician to identify Phenomenological Primitives. Since children's existing ideas have a major influence on learning, it is necessary that the teacher should be sensitive to his or her pupil's ideas. If teachers are aware of some possible views held by children at various age levels, then they can device appropriate methods to deal with different views held by their pupils. Where pupil's views are completely unknown, an awareness of the significance of pupil's views can in itself lead to a different approach in the teaching-learning process.

Recent studies have highlighted the importance of teachers' understanding how children learn. To teach children successfully, teacher requires an understanding of how children think and construct scientific knowledge as well as a thorough understanding of science (Alsop, 2003). It is usually not possible, in ordinary class interactions, to explore any one pupil's ideas in depth. However, small changes in emphasis by the teacher can assist here. For example, when an inappropriate or unexpected answer is provided by a pupil in a teacher-led discussion, a few moments can be spent attempting to find out why the pupil gave that answer. So, often in class, the inappropriate answer is ignored and the teacher moves the question on to another pupil in constant pursuit of the 'right' answer. To discover or to diagnose children's existing knowledge, teachers must provide plenty of opportunities for pupils to express their ideas, whether in small groups or in whole-class settings. However, this in itself is not enough. Teachers, need to ensure a classroom climate where children's ideas are valued and listened to. The role of teacher as a listener is inherent in the role of 'teacher as a diagnostician' (Osborne & Freyberg, 1985).

Sample

A 10-item test was administered to 414 sixth grade students from twelve schools of Kottayam Distirct, Kerala, taking into account the type of school - government, government aided and unaided.

Tools

There are several techniques and instruments such as; (1) interview about instances and events, (2) prediction-observation-explanation, (3) drawings, (4) paper and pencil tests based on multiple-choice items and (5) two-tier multiple choice tests that can be used in identifying phenomenological primitives/ naïve conceptions/prior knowledge. Of these approaches, two-tier multiple choice item is the most common tool that has acquired strong support. Items of the test were modeled on the work of (Pesman & Eryilmaz, 2010).

A test with a total of 10 items was administered to 414 sixth grade students. Five questions were yes or no type and five questions were two-tier multiple choice questions with diagrams. The items in two-tier multiple choice diagnostic instruments were specifically designed to identify students' p-prims.

The first part of each item consists of a multiple choice content question having four choices. The second part of each item contains a set of four possible reasons for the answer to the first part. Incorrect reasons were derived from student's p-prims gathered from research, interviews, and free response tests. For example,

Observe the figures **A, B, C, D.** Of these which (figure) shows the flow of electricity?

A.
Cell

B.
Bulb   Cell

C.
Cell   Bulb

D
Cell   Bulb
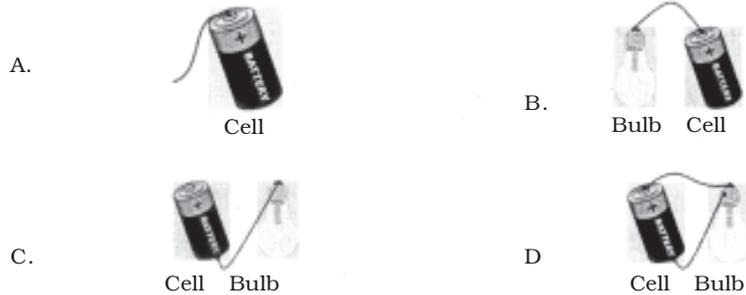
Flow of electricity is in [put a (P) mark against the selected answer]

(i) A & C   (_ _ _)
(ii) B & D   (_ _ _)
(iii) D only   (_ _ _)
(iv) In all these cases (_ _ _)

Explain why you selected the answer.

Interviews were conducted without any predetermined set of questions and the interview was essentially exploratory (Marriam, 1988). Notes were taken down during the interview.

Fig. 1

Results

Of the 414 sixth grade students 376 students (90.82%) hold that sugar solution is a homogeneous solution. 309 students (74.64%) agree that to complete a circuit with a cell and a bulb, two pieces of wires are required. But 70 students (16.91%) gave the response that when a cell is connected from the top (as shown in Figure 1) will cause the bulb to glow.
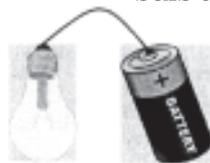
12 of the 414 students (2.90%) hold the view that still and moving objects possess energy. 333 of the 414 students (80.43%) have the notion that only moving vehicle and rolling ball have energy. It is surprising to note that 211 students (50.97%) agree to the proposition that a table even though at rest contains energy. It is quite intriguing that quite a few students selected that a still table possesses energy but not a still ball. The explanations to these answers and responses during interview will further help understand why they have given these answers.

Three students were interviewed about their responses/reasons to each question. Also, the explanations given by 414 students in writing as part of the test were analysed. The results of the interview and explanations are paraphrased and given below to increase clarity and brevity.

"A moving vehicle and a rolling ball possess energy. A moving vehicle will have more energy. Without energy vehicle cannot run. If they have no energy they won't move and roll. Only a vehicle with energy will run. A moving vehicle has energy for sure. A moving vehicle and rolling ball are working and therefore they have energy. Wheel of a vehicle is rotating and ball is also rolling, therefore, both have energy. Objects at rest have no energy. Those which are stationary possess no energy. Those which having energy travels/works. Objects which are not working have no energy."

Another question was related to mass of an object. The question reads: An object has a mass of 10 Kg on earth, what is its mass in moon?

  (i) More than 10 Kg
  (ii) less than 10 Kg
 (iii) 10 Kg
 (iv) 0 Kg

49 of the 414 (11.84%) students selected the answer as 10 Kg. 250 of the 414 students (60.39%) selected that the mass in moon will be either less or more than 10Kg. Their reasons as revealed in the response and interview are given below.

"In moon the mass is less because it is far from earth. There is no air in moon and objects will fly in moon. Since there is no air there is no mass. The mass of moon is less than that of earth, therefore mass of an object in moon is less than that on the earth. Moon is a satellite of earth. It will be less than 10 Kg because moon is smaller than Earth therefore, gravitation in moon will be less than that of Earth. But an object on the surface of moon will experience more attraction since the distance from the centre is less compared to Earth. Gravity is less in moon therefore mass is less. Moon being small, the gravitational force is less."

Discussion

The results of the exploratory study indicated that students do possess p-prims, naïve conceptions and prior knowledge about concepts in science. The existence of the p-prim that only moving objects possess energy is a p-prim as well as a naïve conception. The students' concept regarding electric circuit may be interpreted in terms of their prior knowledge contributed by the experiential base. However, the concept of mass of an object on earth and in moon was absent which may be attributed to lack of prior knowledge and the p-prims that they possess. Moreover, the concept is not of relevance to every day life. Formal exposure to science will have to deal with these p-prims and naïve conceptions. The quality and nature of responses indicate that the p-prims, naïve conceptions and prior knowledge do unfold in the context of appropriate situations.

REFERENCES

Alsop, S. 2003. "Learning science", In S. Alsop & K. Hicks (Eds.). *Teaching science.* New Delhi: Kogan Page India Private Limited.

Carey, S. 1986. "Cognitive science and science eduation", *American Psychologist*, 41(10), 1123-1130.

Champagne, A. B., Gunstone, R. F., & Klopfer, L. E. (1983). Naïve knowledge and science learning. *Research in Science & Technological Education*, 1(2), 173-183.

diSessa, A. A. 1983. "Phenomenology and the evolution of intuition". In D. Gentner & A. L. Stevens (Eds.), *Mental models* (pp. 15-33). Hillsdale, New Jersey: Lawrence Earlbaum Associates, Publishers.

diSessa, A. A. 1988. "Knowledge in pieces", In G. Forman & P. B. Pufall (Eds.), *Constructivism in the Computer Age* (pp. 49-70). Hillsdale, New Jersey: Lawrence Earlbaum Associates, Publishers.

Dupin, J. and Joshua, S. 1987. "Conceptions of French pupils concerning electric circuits: Structure and evolution", *Journal of Research in Science Teaching*, 24(9), 791-806.

Hewson, M. G. 1986. "The acquisition of scientific knowledge: Analysis and representation of student conceptions concerning density", *Science Education*, 70(2), 159-170.

Labudde, P., Reif, F., and Quinn, L. 1988. Facilitation of scientific concept learning by interpretation procedure and diagnosis. *International Journal of Science Education*, 10(1), 81-98.

Lewis, E. L. 1991. *The process of scientific knowledge acquisition of middle school students learning thermodynamics.* Unpublished Doctoral Dissertation, University of California, Berkeley.

Merriam, B. S. 1988. *Case Study research in education: A qualitative approach.* California: Jossey -Bass Inc., Publishers.

Osborne, R., and Freyberg, P. 1985. *Learning in Science.* Auckland: Heinemann Education.

Pesman, H.., and Eryilmaz, A.. 2010. "Development of a Three-Tier Test to Assess Misconceptions about Simple Electric Circuits", *Journal of Educational Research*, 103(3), 208-222.

Rajan, K. M. 2010. "Constructivism: An approach to classroom practice", *Pedagogics*, 8(1), 64-68.

Reif, F. 1987. "Interpretation of scientific or mathematical concepts: Cognitive issues and instructional implications", *Cognitive Science*, 11, 395-416.

Project Work to Promote Language Learning

R. MEGANATHAN*

Abstract

Language learning is aimed at making learners use the language for real life purposes. This is not limited to using of language(s) for communicative purpose only; learners need to use language to function in professional, academic and social settings. This demands higher order language and thinking skills. Nature and characteristics of the classroom has to change to meet this demand and teachers have to explore ways and means of enabling learners 'engage' with language(s) in and out of the classroom. Tasks, activities and assignments are to be conceived of not in the conventional teacher dominated sense; they need to help learners in noticing the form and meaning of language(s) by using it in real life activities/task. Project work of this nature would help in promoting language learning. This paper attempts to make a case for projects for language learning and discusses the possible ways and means of designing and carrying out projects as language learning tasks where learners work with language for a period of time. At the end, it also provides a list of projects which could be carried out at different stage of schooling.

Why projects for language learning?

Language learning involves learners getting engaged with the language. We know that exposure to language through visual/print and oral medium is essential. This is what the textbook, other print and audio materials and the teacher's language attempt to do. This exposure is alone not sufficient. We need to give opportunities to children to work with language. Children should read, think about the ideas of the text, understand the meaning of the words, associate them with ideas and other words, notice the form of the structures, etc while being exposed to the language and working with language on their own. This engagement with language makes them internalise meaning of words and structures. In addition to textbook activities, project work could be used as an effective strategy to promote collaborative ways of language learning where learners in groups work together

* *Assistant Professor*, Department of Languages, NCERT, New Delhi 16

to do an activity or a task for some period. When learners work together on a particular idea/topic, they collect information, ideas, observe language being used, use language in real life situations, exchange views and debate on ideas, write the ideas into a report, edit their writing and produce the report in a suitable form. National Curriculum Framework (NCF) – 2005 and the Position Papers on Teaching of English and Indian Languages laid stress on learner-learner interaction and moving beyond the textbook to connect the classroom with the life outside the classroom to maximise learning. Projects can be an instrument in realising this aim. Projects can be designed to be carried out by a group of learners on topics/themes. This helps in achieving learners constructing ideas and make critical judgments to arrive at a decision/conclusion. More importantly learners use language in contexts. This chapter presents how project in languages, particularly English as a second language could be designed and carried out by students in school.

Designing and Managing Projects

There are many ways learners can be initiated to carry out projects. The major aim of the activities/tasks learners do should enable them read books, newspapers, listen to radio, watch TV, consult websites, talk to people, observe events and proceedings, interpret and report. This clearly indicates that the learners work with language i.e. use language for meaningful real life purposes. If the meaning of learning is 'meaning making' the purpose is achieved in full while doing projects. This only gives clues that learners should do

the project in groups on their own independently, not ask their parents to buy readymade products available in the market. They may seek information or some help from parents or elders as they do with their teachers. Also projects should not over burden them.

It would be of much benefit to learners, if projects are planned of interdisciplinary nature. Since all learning is language learning, project work of interdisciplinary nature will promote better understanding of the subject (say social science, science, etc) as well as promote language learning. This also promotes language across curriculum (LAC) perspective for meaningful language learning. Teachers of various subjects will have to come together to plan projects of interdisciplinary nature. The textbooks developed by NCERT as a follow up to NCF- 2005 include short and long term projects which are directly linked to the themes of the texts/lessons. A project can be carried out in many ways. Following steps may be followed:

- **Selecting and briefing:** Projects can be initiated when learners and teachers decide on a topic. It is better to encourage students to bring their own ideas and have a whole class discussion to allot topics to each group and teacher may offer a list of possible topics. Sometime whole class projects can also be thought of.
- **Planning and language generation:** Having chosen a topic for the project, learners now work together to decide upon how to proceed and what kind of language needs to be used. Teacher has to

direct this very carefully and here is where the learners need guidance and support. Some of the initial discussions may take place in the classroom paving way for activities in and outside the school. The work can also be divided among learners.

• **Collection of date/information/ details:** Learners gather required data/information from a number of sources. They can consult encyclopaedia, read books, interview people, collect pictures and illustrations, record audio/video, visit internet, watch TV, etc. They can write their field notes to remember and organise the data collected.

• **Planning, writing the draft and editing:** After collecting the required data/information and ideas, it is now time to plan and organise the data and interpret them to write the draft. Since most of the projects in language(s) will be of written report or written creative work like play, songs, essays, chapterisation could also be planned. It is also possible to have projects in which learners work together to script and enact a play or direct and enact a play. Editing is important part of writing the report. Learners should be made aware of process approach involved in writing a good piece of work, which involves various stages.

• **The result and presentation:** The goal of the whole project has been aiming is reached when the learners working together produce a report or do an activity as intended. The final product may be written report, a play, collection of songs or enacting a play or a big role play, writing posters, etc. Learners are now asked to submit to the teacher and present it to the whole class or to the whole school during assembly or special occasions (in case of play, songs, etc.)

• **Follow Up:** Teacher with the group carried out the project can think of possible follow up activities that would enable students to use language in contexts. For example, a project given in the list at the end is about class newspaper. This could be explored as a continuous feature and some other group could try the next issue of the newspaper/ magazine. Teacher should take care as the project should not hamper the other learning activities of students.

Teacher's role

Teacher is the facilitator throughout the life time of the project. He/She is a catalyst and makes him/herself available whenever the learners need-helping, prompting, clarifying and delimiting. Consultations with the teacher concerned or other subject teachers (if needed) are of immense support for learners to accomplish the task. Teacher along with students in the initial classroom discussions develop a schedule of activities for each group and number of meeting/consultation that they can have with the teacher while doing the project. It is not difficult for the teacher (to some extent) to know about each student and his/her area of interest and how he/she could do things. Teachers should be able to suggest activities (i.e. projects) that would suit

to the interest of particular group of learners.

Assessing/Evaluating Project Work

Projects are part of the assessment process of Continuous Comprehensive Evaluation (CCE). We need to ensure that each learner in the group takes active part in the work and contributes for the successful completion of the task. It is also very important that each learner is engaged with language (use the language in various ways) while doing the project. Teacher may keep a check list or a chart to record what has been happening (who does what and how) during the project. Asking each learner in the group to maintain a diary of their work plan, how the information/data was collected and interpreted, the problems faced and the way the report / the final product was brought out, etc. could be of use for the teacher in assessing individual contribution in the group. This is one part of the assessment. Teacher has to observe and record how each student in the group and each group as a whole make progress in carrying out the project. A checklist or portfolio may be developed to record the progress made by each student and each group. Descriptors to indicate the work done by each learner could be created by students and by the teacher. We may also have specific guidelines (developed by teachers themselves) for assessing the project work as part of the Continuous Comprehensive Evaluation (CCE).

Descriptors in the Portfolio/Record may look like this

Criteria for Assessing the Performance	Selection	Collection of Data	Compilation / Interpretation	Reporting and Presentation	Collaboration in the Group
A	Suggested the idea or provides an alternative idea		Ideas elaborated coherently with clarity		The group worked together well. There was cooperation
B	Supported the idea and provides more evidence				
C	Shown interest in carrying forward the idea generated.				
D	Remained passive or non receptive to ideas.				

Following section presents two project titles (one short term and one long term) and the processes involved in carrying out them and a list of projects with a short description.

Short Term

1. Designing a brochure for tourist about your town/village.

*Level: Elementary & Secondary
        Age: 12 – 16 years*

Time: One/Two week(s)

General Aims: To produce a brochure for tourist and visitors to our town/ village.

Language Aims:

i. To develop four language skills and strategic competences by using interviewing techniques, collection data/information about people, places and economic indicators;
ii. To learn using appropriate vocabulary and structures specific to idea (a brochure);
iii. To learn writing a poster from the collected information.

The Process: Teacher has a brain storming discussion with the group about the idea/theme and asks learners to chalk out a plan of action for the project. Learners plan and allocate work to each member of the group and collect required information. They work together to design the brochure based on the collected data. The collected information from various sources-interviews, photos of monuments, facts and figures about the village, etc. will now be scrutinised and shaped into a poster/brochure to present it to a visitor attractively. The brochure is made by the group using colourful ink, crayons, etc and the same is presented to the class.

Long term

2.   Class Newspaper

*Level: Elementary and Secondary
Age: 12-16 years*

Time: Three months (Flexible)

Aims: To produce a class/school newspaper for the village/town.

Language learning: To develop all fours skills by using various techniques, methods like interviews, writing news, etc.

The Process: Students are briefed about the aim of the project and the possible outcome. They discuss the plan and decide on the various activities and contents of a newspaper by analysing available newspapers. Students allocate work among themselves and decide who takes interviews, who reports events like festivals, accidents, etc. who writes the draft news items, who editing and final writing by hand or printing (using computer), etc. They work of for some time to collect data and develop the newspaper with in the given time frame. Then the newspaper is published with illustration, pictures, etc. Possible follow up activities can also be thought of.

Following are some topics/themes for project work for various stages

3. **Biographical profile of a person/ ersonality in your area.**

Students in group meet a person in their village/town and interview him/her to develop a profile of the person and write a report.

4. Writing autobiographies

Each one in the group writes his/her autobiography and compile them to present the class**.**

5. Quotable quotes

Students consult books, magazines and newspapers to collect quotes of great people and proverbs and compile them to theme/alphabetical order.

6. Writing review of movies

Students watch some movies over a period of time and write review of them. They can also compare the reviews with the ones published in newspapers.

7. Book review

Students read books of their choice and write reviews of them. They can consult with the newspaper, magazine or journals to know how to write a review.

8. Varied ways of reporting an event in newspapers.

Students are asked to read three or four newspaper and follow a particular or some stories. They analyse the news stories and comment on them.

9. Collecting views and opinions of people on a particular issue or problem.

Students take current issue or problem and ask for the opinion of people about the issue and report it with graphical representations.

10. Writing article to newspapers/ magazines.

Students write articles to newspapers/magazine on a current problem or issue. This could be done as individual as well as group activity. Teacher has to guide them well from thinking about the idea to getting the article published.

11. Writing letters to the editor on a particular issue.

A group of students are encouraged to write letters to the editor in response to some of the articles/issues published in the newspaper.

12. Develop and conduct quiz competition

Students in groups develop questions for quiz content in the school/class. They decide how to conduct the quiz, collect information/ideas for quiz questions, design question and answer card for all questions, and then conduct the quiz competition. The process from the beginning to the end is to be written as a report.

13. Collection of folk songs

Students in groups collect folk songs from their locale/village, categorise them into various themes like children, nature, romance and love, devotional, poverty, etc., then they attempt to write the summary of each folk song they collected. They can also find connections between the folk songs and the history/events of the village. The same is to be presented in a report form.

14. **Translating folk song from Indian language to English or vice versa**
    Students in groups will collect songs from their mother tongue and translate into English. This requires a lot from students and teachers. It may be twenty or so poems/songs from an Indian language or from many languages. They may do it in many stages and can also compare the songs with available translations. The same is presented to the school library.

15. **Watching a serial in the mother tongue and report the same in English or vice versa.**
    This is to exploit what is considered not so good a habit. Students in groups watch a serial for a week or month and write episode wise summary of the same. They can report it with an introduction and a conclusion, commenting on the theme, acting, characterisation and other of the serial.

16. **Designing greeting cards for an occasion.**
    This may be done as group or individual activity. Students design greeting cards for an occasion, such as Christmas, Diwali, Pongal, and New Year or other occasion using the locally available resources and display for sale in school.

17. **Conducting surveys and reporting them.**
    a. Eating habits survey
    b. Pocket money survery
    c. Sleeping and play routine survey
    d. Study habits survey
    e. Person of the year survey
    f. Use of tobacco

Students develop a questionnaire and contact people to collect information about the habits they indent to survey. They write a report based on the data collected. The whole process from developing questionnaire is reported

18. **Language and art of advertisements.**
    Students collected advertisement from various sources like billboards, wall notices, pamphlets, newspapers, etc. and analyse how the use of language in them. Advertisements from many languages can also used.

19. **Planning a tour/trip.**
    Students in group plan a tour or trip a tourist spot located nearby place. They collected the money required from each student, book the vehicle for travel, or book train ticket, book hotel/guest houses for stay, etc. and decide the places to visit. After the tour/trip they write a report.

20. **Developing a blog on the web and coordinate the same with friends.**
    Students in groups develop a blog on web, design and develop materials-print, visuals, songs, etc. and ask other students to comment on each one's posting on the web.

21. **Developing the school website.**
    Students with the help of the computer science teacher design and develop a website for the school. They collect required information from the principal, teachers, and alumni of the school and post the same on the web.

22. **Holidays and Festivals of the locale.**
    Students in group do project about

the festivals of the locale and report how people celebrate, the food eaten during the festival, dresses, rituals, purpose and reason for the festivals, etc.

23. **Developing a radio/audio programme.**
Students in groups develop an audio/ radio programme consisting of songs, speeches, talk shows, interviews of people from the locale. This can be done multilingual or bilingual. Students plan, write scripts, develop questionnaires and audio record the same after many trials. The final product will be recorded and the same is produced to the class school assembly.

REFERENCES

NCERT. 2005. *National Curriculum Framework*. New Delhi.

NCERT. 2006. *Position Paper: Teaching of English*. New Delhi.

HARMER, JEREMY. 2001. *The Practice of English Language Teaching (Fourth Edition)*. London: Pearson Longman.

A Multi-sensory Approach to the Teaching of English as a Second Language through the Use of Dramatic Activities

Bernadette D'Souza*

Abstract

A boring English Language class can be transformed into an exciting experience, through the inclusion of dramatic activities for all age groups and all levels of schooling. These activities have an amazing and tremendous effect on students as they touch upon multi-learning styles and intelligences through a multi-sensory approach.Children have a natural desire to 'act' or to 'express' their inner feelings in some outward form, and so, with the introduction of dramatic activities into classroom teaching, they are provided with the necessary outlet for their feelings and emotions. From an early age they create characters and stories to explore the world around them. The non-verbal communicative aspects of language like body language, gestures, and facial expressions, as well as verbal aspects – voice-modulation, intonation, rhythm, stress, and idiomatic expressions, are drawn out in a natural manner.Everything depends on the creativity and enthusiasm of the language teacher. As Albert Einstein had stated, "It is the supreme art of the teacher to awaken joy in creative expression and knowledge". This can be achieved by various dramatic activities for students who are non-native speakers of English!

Jacques, in Shakespeare's play- "As you like it" –Act 2, Scene 7, speaks about man's role in life in the following stirring words:

"All the world's a stage and all the men and women merely players.

They have their exits and their entrances and one man in his time plays many parts. His acts being seven ages "

The very first line "All the world's a stage", metaphorically speaks of the roles that we are called upon to play in our drama

---

* *Assistant Professor*, Department of English Methodology, Nirmala Institute of Education, Altinho, Panjim, Goa.

of life. If we transfer this concept to our teaching /learning situation in schools, it enables us to visualise an intellectually- stimulating, multi-sensory approach to the teaching of English as a second language, through the introduction of a vast and varied number of dramatic activities.

Dramatic activities include a range of artistic languages- the verbal, visual, aural and kinesthetic that help to expand the intellectual and creative horizons of students. Teachers who have been exposed to this pedagogical concept, have provided their students with the opportunity of learning through the use of dramatic activities for the following reasons:

- to provide the necessary framework for genuine, meaningful communication,
- to build a bridge between the classroom and the real world outside.
- to cater, mixed ability groups of students
- to provide a variety of activity and interaction,
- to maximize student talking time,
- to develop creativity,
- to develop intrapersonal and interpersonal intelligences.

Research has proved that dramatic activities hold the attention of students, improve their speech fluency, make them self-confident, improve their self-esteem, give them a better understanding of the literature that they are studying, their personal skills are strengthened and above all, improve their pronunciation and other prosodic features of speech, over the traditional, direct instructional style. Apart from aptitude and attitude, there are four factors that affect the rate at which a student learns a second language. These are; (1) the student's motivation, (2) the amount of time the student spends in class and practicing the language outside class, (3) the teacher's approach to teaching, and (4) the teacher's effectiveness and teaching style. The most important of these are the student's motivation and the amount of time the student spends in class and there are also the factors over which a teacher has the least control over.

Teachers generally follow the usual, traditional approach while dealing with text and themes listed in the language textbooks armed with lesson plans, work-books, they believe that transmitting the facts to the students, drilling them with the vocabulary and grammar outlined there; and finally assessing them by way of exams or tests is all that is expected of them. But, if the fire of imagination is ignited in their minds, they will be struck by the wealth of material that can be drawn out from within the topics themselves, and which then can be woven into a beautiful "Value-Laden" fabric, through the use of dramatic activities.

Foreign language teachers throughout the world have used dramatic activities to make the language classroom interesting and enjoyable. It has been noted that in content-based instruction pupils learn a second language effectively when the information that they need to acquire is perceived as "interesting". A common problem that has faced teachers of English in India, is getting students interested in the study of literature, and

the timeless beauty of poems. Dorothy Heathcote (1995), while expounding on the value of drama in the classroom, states, "In drama, the complexity of living is removed temporarily into this protected bower, so that children not only can learn it and explore it, but also enjoy it."

The texts prescribed for language learning often have a rich source of material that can be safely converted into a dramatic activity like a skit, role-play or even a full scale class drama. This will enable students to explore the linguistic and conceptual aspects of the written text without heavy concentration on the mechanics of language. Experimentation with the non-verbal communicative aspects of language like body language, facial expressions, and gestures combined with the verbal aspects like voice-modulation, intonation, and extensive use of idiomatic expressions fall in effortlessly. They also get that unique experience of "walking in the footsteps of another". This allows the participant to immerse himself/herself in the place, times, and challenges of another in order to see the situation through his/her own eyes.

A teacher is morally obligated to develop her students holistically, and as Maley and Duff (1978) have stated, "Language is not purely an intellectual matter. Our minds are attached to our bodies, and our bodies to our minds. The intellect rarely functions without an element of emotion, yet it is so often just this element that is lacking in teaching material. The use of drama and dramatic activities attempt to put back some of this forgotten emotional content into language and put the body back too".

Everything depends on the creativity and enthusiasm of the language teacher.

Incorporating dramatic activities in the classroom

Language teaching focuses on the improvement of each of the four skills-namely, listening, speaking, reading and writing. The inclusion of dramatic techniques has a great role to play in each of these areas, especially with regard to correct pronunciation, enunciation, intonation and various other features that are prosodic in nature.

With the emphasis on the use of the Communicative Approach in Language Teaching, the use of dramatic activities will provide the necessary impetus. The role of dramatic activities here is more than obvious even to a casual observer. These activities generate a "need to speak"-thereby emphasising production rather than reception. Activities included here are:

a. Role-plays and Simulations: Where students are expected to take on the personal attitude or behavioural style of someone else- a total stranger.

b. Skits and Plays: These include any activity from the prescribed text-book like acting out a scene from a lesson, or enacting a whole story that has been scripted; to presenting a complete stage-performance with all the theatrical works. This is a sort of project extension from a prescribed text. The teacher should have a clear purpose for selecting and implementing such an activity..

c. Drama Games: These will include ice-breakers, brain-teasers,

energizers etc. Such activities are generally used at the "set-induction" time of teaching to motivate the students and draw their attention to a particular topic/s.

d. Conversational Activities: Here students are required to use their language skills to communicate in authentic situations, for example, interviewing, reporting, inquiring, discussing etc.(Nolasco & Arthur-1987 is a good source for Conversational Activities).

Other aligned activities include discussions, elocutions, debates, language games, dramatised play-readings that create all kinds of learning opportunities.

Planning the Approach: Integrating dramatic activities with the Text

Select a number of short plays or stories that can be read and understood easily. Stories transport children into an enchanted realm of their own imagination. The material can be the choice of the teacher and should contain vocabulary that is, for the most part, understandable to second language learners, and they should address issues that have some cultural or social meaning.

Stage 1 The pre-reading/listening stage

The aims are to stimulate oral communication, reading for pleasure and to enrich thinking and expression. For this reason, drama techniques focus on awakening the imagination, and the body including the vocal chords, in preparation for reading or even enacting the text.

Stage 2 The while listen/reading task:

• Here, the learner is involved in completing a task based on his/her reading, such as finding out a piece of information from the text.

• Tasks are expressly inserted into the text for the students to solve, using their own ideas.

Stage 3 Comprehension

• This involves the asking of comprehension questions such as: Who? When? What? etc.

• Multiple-choice questions are useful for evoking possible alternative answers.

• Text- attack questions require the learner to realise certain meanings in the text and the way they are achieved in the language use.

• Interpretation and response tasks/ question: What's the message from the author? What general meanings can we infer from the antagonists' statements/actions? What conclusions can we draw about the character and motivations of the antagonists? How is that expressed through the language? How do you feel about the character? How did you feel as the character? Response calls for the learner to express an opinion or feeling and to often say why they feel this or have this opinion.

As a homework assignment, the student/actors could be asked to write a detailed autobiography about their character, filling in all details of their character's life from the minimal clues provided in the script. Classroom practice, could then follow.

Generating ideas/Brainstorming: Group/Team Activities

Everything depends on the creativity, enthusiasm and ingenuity of the Language Teacher. As the goal of drama is to develop the participants' creativity and breadth of vision the teacher can devise ways and means of spreading values that the modern day world seems to have forgotten and inculcate these values through role plays, skits and dramas.

Anti-War Poems like –"No men are foreign" ,"Fire and Ice" etc., lend themselves to various possibilities as far as "values" are concerned. The entire human race is threatened by many forms of violence resulting in acts of intolerance, violence, xenophobia, aggressive nationalism, racism within societies. We, as teachers can involve the younger generation and make them aware of the important role that they should play to stem such barbaric activities. How can we do this? Through dramatic activities some of the following activities will be useful.

Lead a classroom discussion on current events that have caused turmoil all around the world- terrorism, war, communalism etc through the following questions:

- What are the major obstacles to peace in our times?
- How can we spread peace and harmony in our own little sphere of life?
- How can we resolve conflicts that arise due to caste, colour, prejudice and religion?
- Working in groups let the students brainstorm ideas on staging a skit that would highlight these sort of themes. Let them write out dialogues for each character that they create for their skit. The characters could be politicians, activists, journalists, academicians, youth, students or parents.
- Songs based on the theme selected could be added to make a better impact.
- Finally, stage the performances in the form of street plays, skits, role-plays- using banners, posters to grip the attention of the passers-by & catch the eyes of the crowd.

Apart from staging plays related to current events or themes of interest, concerts and dramas will always centre around the enactment of the world's best stories, plays etc., the term which the world uses for literary pieces of immeasurable value.

Preparing for Action

1. Once a play or story is selected as a model, the pronunciation, intonation, stress, rhythm, and oral expression. To help facilitate comprehension the teacher provides students with the background of the story or play and introduces difficult or unusual vocabulary idioms, cultural aspects, and plot; stimulates interest and conversation by interacting with the students; and establishes a workshop atmosphere of 'Role Enactment'. The play is read aloud to the students, after which the class discusses it together. The students then prepare to dramatise by selecting character roles and discussing scenery, props, lighting, and costumes.

2. The teacher has to listen to the students reading their parts a section at a time and train their speech. Mispronunciations should be pointed out and corrected immediately. As English words are stressed, in that certain syllables, both within words and within phrases, get a relative prominence/loudness during pronunciation while the others do not. They should be trained in the articulation of the phonemes and their understanding of appropriate use of stress and emphasis to produce meaning ought to be developed. While students read the plays aloud, coach them in expressive use of stress and intonation to produce meaning, letting students note with phonetic symbols the areas of pronunciation that need to be worked on. This technique was developed and used for generations in the training of professional actors. In the U.S, the technique has been associated with Edith Skinner, whose book, *Speak with Distinction*, is used as part of speech training for ESOL students(English for Speakers of Other Languages).

3. Complete Script-writing, editing, and refining of the selected play/drama/story.

4. Allotment of Roles and Practice sessions should be held daily for memorisation of lines.

5. A final rehearsal can be held, after which the teacher should provide important feedback to the students regarding their performance.

6. The Big Day performance.

7. Wherever possible get the whole show videoed and don't forget to do the necessary editing of the video too.

In order to enrich and enhance teaching of English as a second language in schools and colleges, I have always made it my duty to enlighten every batch of my teacher trainees of the methodology course, on the manifold benefits of using dramatic activities in their teaching. For this precise purpose, I have included the following activities on a regular ones for the purpose:

a) Dramatics: Initial training in theatrical skills are given to the trainees wherein they are taught the finer nuances of theatrics; reading plays , collecting plays of various types- comedies, tragedies, stage-setting, costuming, lighting, make-up etc. Opportunities are provided to students to use the target language in meaningful contexts and in new and complex ways.

b) Stage Performances: The students participate in many role-play/drama activities based on topics from the Language text books prescribed for standards 6-10. They also prepare scripts of their own, individually selected topics. Through these activities they are exposed to broader avenues of the teaching/learning process and gain the necessary skills for enriching their class-room teaching.

c) Language Games: Games are highly useful in an English Language Classroom. The participants work individually or with others to accomplish the goal of the game, and if the goal is not accomplished

at the first try, the participants have still learned something from the experience. A number of activities are conducted to make the task of teaching English prose, poetry and grammar enjoyable to the students and to bring in an element of fun into the classroom, through tongue twisters, role-play, board-games, quizzes etc.

Teaching of the Four Skills; Listening, Speaking, Reading & Writing

Language teaching focuses on the improvement of each of the four skills- namely, listening, speaking, reading and writing. The inclusion of dramatic techniques has a great role to play in each of these areas, especially with regard to correct pronunciation, enunciation, intonation and various other features that are prosodic in nature.

With globalisation and the challenges that face the modern generation, we can help students to hone their skills and be successful in life, by providing a dynamic, multi-dimensional approach to classroom teaching. For it has be proved, that students who are exposed to such types of interactive methodologies throughout their High School and Higher Secondary years of study, are able to step out into the real world as more intelligent, more confident, more articulate and highly effective public speakers. What more can we ask for!

REFERENCES

Maley, Alan.1983."A room full of human beings". *Guidelines-Drama*, 5:2, pp.1-12.

Maley, A. and Duff, A. 1978. *Drama Techniques in Language Learning.* Cambridge: Cambridge University Press.

Heathcote, D and Bolton, G.1995. *Drama for Learning: Dorothy Heathcote's Mantle of the Expert Approach to Education.* (First ed.). Portsmouth, NH: Heinemann.

Dougill, John.1987. *Drama Activities for Language Learning.* London: Macmillan Bird, Allan.1972. "The use of drama in language teaching". *ELT Journal.* 33:4, pp.290-96.

Ladousse, G. P. 1987. *Role Play.* Oxford: Oxford University Press.

Constructivist Didactics in Teaching Economics: A Shift in Paradigm to be Exemplary Teacher

Ziyn Engdasew Woldab*

Abstract

This paper begins with a critique of the prevailing behaviourist instructive which promotes a model of imparting and receiving knowledge in economics education. This approach is criticised for its inadequacy to facilitate higher order thinking, problem solving, creativity and collaborative learning. Contemporarily, research findings in cognitive learning shift the paradigm and provide new dimensions to information processing and constructivist view of teaching economics. It recognises learners as constructor of knowledge and an active participant in the process of learning economic facts and principles, and economics teachers as facilitator of students' learning. This theoretical paradigm in teaching economics doesn't disvalue the instructional roles of teachers, rather it advocates that teaching economics should not only instructive but also constructive. Hence, this paper presents the philosophical and psychological roots and major pedagogical principles of constructivism, the rationale for adoption of traditional instructional perspectives with modern constructivist approach and its practical implications in teaching economics.

Introduction

Teaching is a scientific and goal directed activity. It is the most fundamental responsibility of teachers irrespective of their time and stage of education. It is an intricate and complicated process involving diverse pedagogical skills and sensibility as well as scientific principles and modern approaches. Teachers should not only acquire the quantum of knowledge that is required for various groups of learners, but also use diverse contemporary methods and techniques of teaching for which they have to master knowledge and skills. The quantum of approaches and pedagogical techniques

* *Assistant Professor*, Adama University, P.O. Box 1888, Adama, Ethiopia.

is being multiplied so fast and some of the theories and concepts are getting outdated that there has been an innovation in the approaches of teaching. Pedagogical research findings indicated that, two major learning theory metaphors have dominated education (behaviourism and constructivism) as a whole since the late 1800s, however since halfway through the nineties, the constructivist approach of learning and teaching has represented the "newcomer theory in didactics"(Jackson, 1990).

As per behaviourism, learning is the acquisition of Stimulus-Response pair and the result of instruction. In this traditional learning- teaching philosophy, the predominant understanding of didactics is characterised by interventions. The acquirement of new knowledge and skills is considered to be a process controllable from the outside that has to be imposed on the individual learners. Meanwhile, learning through intrinsic motivation is widely ignored. Learning targets are predominantly formulated behaviouristicaly and this leads to the taylorisation of learning (Jackson, 1989).

Learning is the construction of knowledge in the perspectives of constructivism, and it is the result of construction. These changes in explanatory metaphors have resulted from, and have allowed for new insights concerning the nature of learning, the methods of teaching and acquisitions' of knowledge and skills. In this context, the assumption of constructivist didactics is that reality in learning process is not perceived in the way it is, but in the way the learner experiences it. Therefore, learning doesn't mean perceiving given

contexts, but it does mean form own ideas (Brooks and Brooks, 1993).For many quarters of a century, the implicit learning theory and didactics underlying the curriculum and pedagogy of economic education, has been behaviourism. Economics education has much to learn from recent advances in knowledge of how students approach learning (Mayer, 2003). In this respect, the emerging theory of constructivism has implications for educational practices of economics education, which provides higher order thinking, problem solving and collaborative learning.

This paper highlights the theoretical assumptions of behaviourist and constructivist philosophies and looks for the essential features and didactics of constructivists, role of constructivist teacher and its implication in teaching economics to be exemplary teacher.

The Basics of Behaviourist Theory

The learning theory of behaviourism concentrates on the study of overt behaviour that can be observed and measured rather than what occurs in the mind (Good & Brophy, 1990). It views the mind as "a black box" in the sense that Response–Stimulus can be observed quantitatively, totally ignoring the possibility of thought processes occurring in the mind (Doolitltle, and Camp, 1999). It supports the practice of analysing a task and breaking it down into manageable chunks, establishing objectives, and each measuring performance based on those objectives. It promotes desired behaviour and knowledge is transmitted (Ibid).

The application of behaviourist theory to the classrooms of economics

education has generally been referred to as explicit or direct instruction. The teacher is the only active agent in the classroom, transmitting knowledge to students who are expected to absorb information passively. This theory is teacher directed and teacher controlled. In this system, competition, grade and, standardised testing are upheld as the means to monitor the students' performance. This theory of learning is criticised for its' inability to address the provision of high order critical and creative thinking, problem solving and collaborative learning.

Constructivism - Epistemological Roots

Constructivism is a theory of learning and teaching that has roots both philosophy and psychology. Constructivist learning is knowledge construction based on the assumption that learners actively create and restructure knowledge in highly individual ways, through experiences. It emphasises the importance of knowledge and skills an individual brings to the experience of learning. It also recognises the construction of new understanding as a combination of prior learning, new information, and readiness to learn (Brooks and Brooks, 1993).

Fosnot (1996) describes constructivism by reference to the major principle: learning is an important way depends on what we already know; new ideas occur as we adapt and change our old ideas; learning involves inventing ideas rather than mechanically accumulating facts; meaningful learning occurs through rethinking old ideas and coming to new conclusions about new ideas which conflict with our old ideas.

The essential core of constructivism is the learners actively construct their own knowledge and meaning from their experiences. Philosophically, this essence relies on an epistemology that stresses subjectivism and relativism, the concept that while reality may exist separate from experiences, it can only be known through experience, resulting in a personally unique reality (Andre Gordan, 1995).

Thus, constructivism acknowledges the learner's active role in the personal creation of knowledge, the importance of experience (both individual and social) in this knowledge creation process and the realisation that the knowledge created will vary in its degree of validity as an accurate representation of reality. These fundamental didactics of constructivism provide the foundation for basic principle of teaching, learning, and knowledge process in any field of study.

Constructivist pedagogy

Constructivist pedagogy is the pedagogy of libration. It is also called the pedagogy of construction (Andre Giordan, 1995). It starts from the needs of the learners and offers appropriate learning environment for their free involvement in learning, their creativity, and their knowledge of how to be. In the constructivist didactics, collaborative and interactive methods are used to encourage students to challenge and consider different perspectives. The cultural and economic environment helps to give meaning to situations, his knowledge progresses when fertile subjective interactions between his

mental activities and his environment are put in place (Ibid).

The general theoretical propositions indicated that eight factors are essential in constructivist pedagogy. These theoretical principles are derived not solely from constructivism, but assembled from other learning theorists in different times (Steff&Galle, 1995).

> ➢ *Learning should take place in authentic and real world environments*- Experience plays paramount role in building accurate representations of reality, consensual meanings in social activities, or personally coherent models of reality. It is well known for its catalysis nature in knowledge construction. However, knowledge construction is enhanced when the socially and object-oriented experience is authentic.

> ➢ *The contents and learning experiences should be relevant to the learner*- Constructivist didactics advocates the adaptive function of knowledge in real life challenges. This relevance boosts learner's motivation in learning and encourages seeking for more adaptive knowledge. Consequently, experience with relevant knowledge and skills will provide the individual with the mental processes, social information, personal experiences necessary for enhanced functioning with in one's real life.

> ➢ *Learning should involve social negotiation and mediation*- Constructivist didactics emphasised the role of social interaction as basis for knowledge construction. It provides grounds for the development of socially relevant knowledge and skills. If learner acquires experience in social mediations, this experience may contradict or validate his prior knowledge and skills. If contradictions appear, then the learner must accommodate this contradiction and uncertainty in order to accurate social model of reality.

> ➢ *Content and skills should be understood within the framework of the learner's prior knowledge*- Every kind of learning commence within an individual's previous knowledge. Understanding a student's behaviour requires an understanding of the student's mental structure. It is only by understanding student's prior knowledge and experience, will the teacher be able to create effective experience, resulting in optimal learning.

> ➢ *Students should be assessed formatively, serving to inform future learning experience*- Constructivists advocate that the acquisition of knowledge and understanding is a continuous process that is highly influenced by student's prior knowledge. However, knowledge and understanding are not directly visible, but rather must be inferred from action. Thus, to take into account an individual's current level of understanding in this ongoing teaching and learning process, a teacher must continually assess the individual's knowledge. This formative assessment is necessary to accurately create the

next series of experiences and activities for students.

➢ ***Students should be encouraged to become self-regulatory, self-mediated and self-aware***- The basic assumption in constructivist pedagogy is that learners are not passive recipients of knowledge, rather active in their construction of knowledge and meaning. This activity involves mental manipulation and self organisation of experience; and requires that students regulate their own cognitive functions, mediate new meanings from existing knowledge, and form an awareness of current knowledge structures.

➢ ***Teachers serve primarily as guides and facilitator of learning***- As per constructivist pedagogy; there is no factual knowledge to transmit. The typical role of a teacher is motivating learners to construct their own knowledge, providing examples and illustrations, discuss, facilitate, support and challenge, but not to transmit knowledge. The teacher is also responsible to guide students to create awareness about their experiences and socially agreed-upon meanings. Neuhauser(1992) put it best that teachers do not teach, but students learn. Students should ask their teachers: "*Let me discover, don't tell me things, give advice in my terms, when my work is poor, tell me how to improve it*".

➢ ***Teachers should provide and encourage multiple perspectives and representation of content***-

Learner's exposure in experiencing multiple perspectives of a particular event provides the student with the raw materials necessary to develop multiple representations. These multiple representations provide students with the ability to develop more complex schemes relevant to the experience. In general, multiple perspectives provide the students with a greater opportunity to develop a more viable model of their experiences and social interactions. This principles are versatile and the backdrop of the pedagogy of constructivist classrooms, role of constructivist teacher and applicable in the strategies of constructivist teaching.

The Constructivist Classroom in Teaching Economics

Constructivists' pedagogy mainly emphasised the need to establish democratic classrooms and learning environments, which could operate in accordance with the aforementioned basic principles of constructivism. It gives due concern for shared responsibilities and decision making within the learner and the teacher. The classroom is no longer a place where the teacher pours knowledge in economic principles and facts into passive students, who wait like empty vessels to be filled (Senapaty & Pradhan, 2005).

In this respect, (Brooks & Brooks, 1993) clarifies the basic features of constructivist classroom, which have practical implications to teach economics as follows:

• ***Students' autonomy and initiatives are accepted and***

encouraged- In constructivist class rooms, teachers should have to respect and encourage students' ideas, which yields independent thinking and helps learners to attain their own intellectual identity, take responsibility for their own learning and become problem solvers. In this stage, the assumption is that if there is no freedom for free discussion, and to make choices, students are less likely to adopt deep approaches to learning economic facts and theories.

• *Higher level thinking is encouraged*- In constructivist class room, economics teachers should challenge students to reach beyond memorisation and simple clarification of facts, principles and theories of economics. He should also motivate learners to synthesis, analyse, predicting and justifying their ideas and conceptions in their own understandings.

• *Students are engaged in experiences that challenge hypothesis and encourage discussion*- The students should be encouraged to design, predict their own hypothesis about economic phenomenon. The economics teacher should have to give ample opportunities, models and illustrations to test their hypothesis through collaborative and cooperative discussions and mediations in their classroom.

• *Students are engaged in dialogue with the teacher and each other*- In constructivist classroom, the activities are interactive; the class

environment supports the active involvement of students in collaborative activities. These activities and interactions help students change or reinforce their ideas. If they have the chance to explain their views and opinions of economic realities, they can hear others reflections, they can also construct their own personal knowledge.

• *The class uses raw data, primary sources, and manipulative, physical and interactive materials*- Constructivist approach of teaching economics initiate learners to participate in concrete world situations, which help them to analyse and synthesis abstraction with concrete.

Constructivist Strategies in Teaching Economics

Many instructors conceive of teaching as the well organised syllabus, explained in clear and well organised lectures with assignments and examinations to test for mastery. The unwelcome but inescapable fact is that sometimes, this kind of teaching doesn't result in student learning outcomes. It certainly doesn't stimulate the best students in economics classes (Becker, E. W., and Watts, M. 1998).

Research findings indicated the "chalk-and-talk" approach is the instructional strategies predominantly used in the teaching of economics which is based on lecturing that ignore students' view (Walstad and Watts, 1985). The role of the teacher is the transmission of knowledge, learners found to be passive recipients of information; the class is

dominated and controlled by the teacher. It is the common explanation for the low interest of students on economics courses (Becker and Watts, 2001a; George, 2008). Constructivist pedagogy denounces such traditional behaviourists' approaches of teaching economics and recommends its own perspectives through exploring some useful strategies from traditional approaches.

It has been realised that constructivist pedagogy has paramount implications for teaching economics education. First, teaching economics cannot be viewed as simple transmission of knowledge about economics facts, principles and theories from the teacher to the learner through mere lecturing. Second, learning is based on previous knowledge; hence some association should have to create between prior knowledge of economics with the present new knowledge and understandings. Third, economics teacher should have to engage students in learning experiences through brainstorming their prior knowledge and make them to synthesis with the new information.

Some of the strategies that help economic teachers to move towards constructivist approaches are: seeking and using student questions and ideas to guide lessons and instructions; engage students in questioning, activity construct and explain a model and providing adequate time for reflection and analysing the ideas given by students. In general, constructivist pedagogy determines the principles, stages of teaching, strategies and the crucial role expected from the constructivist teacher, which have paramount implications to become a model teacher in economics.

According to Fosnot (1996), some of the stages of strategies that help teacher to move towards constructivist didactics in teaching different subjects are the following. These stages have practical implication in teaching economics.

- *Introduction*- In this phase of teaching, prior knowledge and experience can be activated in many ways. Recall previous knowledge about economics; introducing new theories and principles, asking some questions, which make students to be active participant and eagerly involve in discussions and classroom discourses.
- *Exploration*- Students engage in collaborative and cooperative learning, experimentation, employ learners centered strategies, practice enquiry approach, discuss with teachers and classmates about economics facts and issues.
- *Experiential Mode*- Students interact and challenge each other and discover new ideas, construct their own understandings. Hence, meaningful learning occurs with authentic learning tasks. The teacher mainly acts in the provision of materials and arranging appropriate learning environment and facilitating learning and guiding learners.
- *Abstract Conceptualisation and Understanding*- As per constructivist pedagogical tenets, learning economic facts and theories, is a matter of associating and attaching a new meaning to past cognitive experiences, constructing new explanations, experiences and making decisions.

- *Reflection*- Constructivist teacher encourage students to reflect on their current ideas and findings in the light of earlier hypothesis. This reveals that learners in economics education are encouraged to think about their own learning.
- *Application and Evaluation:* Evaluation is ongoing process of instructional process. This makes the constructivist approach of teaching a cyclic process. This process enable constructivist economics teacher to assess whether the learner has achieved understanding of concepts, theories and principles of economics or not. In general such stages of strategies can be adopted by a committed economics teacher to be both constructive and instructive for effective economics teaching.

The Role of Constructivist Economics Teacher

As research in cognitive science indicated, constructivism as emerging theory of learning is based on the idea that learning occurs when a learner actively constructs a knowledge representation in working memory. In this view of learning, learner is a sense maker, whereas the teacher is a cognitive guide. It plays the role to encourage students to use active learning technique, e.g. experiments, and problem solving, to create more knowledge and then to reflect what they have understood.

Contrary to criticisms by some traditional educators, constructivism does not dismiss the active role of the teacher or the value of expert knowledge.

Constructivism modifies that role, so that teachers instruct students to construct knowledge rather than to produce a series of facts. The constructivist economics teacher provides tools like, problem solving and inquiry-based learning activities with which students formulate and test their ideas, draws conclusions and inferences, and pool their knowledge in a collaborative learning environment.

Thus, teaching economics should not only instructive but also constructive, instruction and construction can be connected successfully, however, which category of economic education and which contents should be filtered. One has to point out which challenges teachers have to meet facing the fields of instructive and constructive teaching approaches. In general, the role of constructivist economic teacher is different from the traditional role of a teacher as information provider. In constructivist classrooms, economics teachers functions as a stimulator of curiosity and resource person. A teacher also acts as senior co-investigator, a guide, as co-learner and as facilitator of knowledge construction.

Conclusion

The central idea dealt with this paper is that currently behaviourist teaching approach is the predominant mode of instruction in the teaching of economics, which makes the subject least popular and not easily understandable discipline indifferent levels of education. Recent research findings in cognitive learning and teaching have given new dimensions of constructivist view of teaching and learning economics.

Constructivist didactics highly recognises learner as a constructor of knowledge and an active participant in the process of learning economics. Contrary to other modern theorists of teaching and learning, constructivists extremely demand teachers, the active role of the teacher and the worth of expert knowledge. It modifies the role that the economics teachers help students to construct knowledge rather than just mechanically receiving knowledge from the teacher. Thus, learning economics should not be only instructive, but also constructive.

Instruction and construction cannot be put in to effect using a simple "all– or-nothing" principle. Learning always demands motivation, interest and activity on the part of the teachers, thus, every learning process is constructive, the major objective of teaching is to enable and activate constructive learning. Learning also requires orientation, instruction and guidance. The teacher should have to play the role of both instructive and facilitator and guide for constructive learning. Hence, it requires a paradigm shift and the commitment to adopt the instructive perspectives with constructivism to be exemplary teacher in economics.

REFERENCES

ANDRE, GIORDAN, 1995. "New Models for the Learning Process: Beyond Constructivism?"

PROSPECTS, Vol.25, No.1.

BECKER, E. W., and WATTS, M. 1998. *Teaching Economics to Undergraduates: Alternative to Chalk and Talk.* Northampton: Edward Elgar.

BECKER, E. W., and WATTS, M. 2001. "Teaching economics at the start of the 21st century: Still Chalk-and- talk". *The American Economic Review, 91*(2), 446-450.

BROOKS,J.G. and BROOKS, M.G.1993**.** *In Search of Understanding: The case for Constructivist Classroom,* Association for Supervision & Curriculum, Alexandria.

CASHIN, W. 1990. "Students do rate different academic fields differently." In *Student rating of instruction: Issues of improving practice. New directions for teaching and learning.* Edited by M. Theall and J. Franklin, Jossey-Bass: San Francisco.

GOOD, T.L., BROPHY, J.E. 1990. *Educational Psychology: A realistic Approach* (4th ed.). White PLAINS, NY: Longman

FOSNOT,T. 1996. "Constructivism: A psychological theory of Learning, in C.T.Fosnot (ed.)."

CONSTRUCTIVISM, Theory, Perspectives and Practice, New York: Colombia University Press.

GEORGE, M. F. 2008. "On the Teaching of Financial Economics: A Pedagogic Note" *Journal of Investing,* 17(3), 105-110.

JACKSON, M. 1990. "Knowledge For What?" *Australian Quarterly 48(1).*

JACKSON, M. 1989. *"Less Lecturing, More learning: Studies in Higher Education".* 14(1).

NEUHAUSER 1992. The Social Contract between Teachers and Students. In Lend Me Your Ears: *Great Speech in History;* New York*:* Norton 1027-30.

PINTRICH, R.S and SCHUNK, D.H.1996. *Motivation in education: Theory, research, and application.*Eaglewood Cliffs, NJ: Prentice Hall.

SENAPATY H.K and PRADAHAN.N.2005."Constructivist Pedagogy in Classroom", *Journal of Indian Education.* Vol.31,No.1.

STEEF,L.P.and GALE,J.1995. (eds.). *Constructivism in Education* Lawrence Erlbaum Associates, Hillsdale, NJ.

VON GLASERFELD, E. 1998. "Sensory experience, abstraction, and teaching". *Constructivism in Education,* ed*.* L. P.Steffe and J. Gale,. Hillside, N.J: Erlbaum.

WALSTAD, W., and WATTS, M. 1985. "Teaching economics in the schools: A review of survey   findings". *Journal of Economic Education, Vol.16, No.2.*

School Leadership in the Wake of RTE Act 2009: Mapping Changes and Challenges

Rashmi Diwan*

Abstract

With changes on two fronts: the social matrix and developments in the education sector, the present era demands a major transformation in the role of School Leaders.The societal awareness levels, change in inter-personal relationships, influx of crime and anti social activities, rise and fall of financial support, demand for removal of social injustice in education and otherwise, students unrest, violence, sex abuse and drug abuse – all such factors lay impact on the ways schools ought to be managed. Within the education domain, the recent act, The Right of Children to Free and Compulsory Education Act, 2009 legitimising the right of each child to have access to good quality education; new education policies and Programme of Action; curriculum changes, global to local; multi language and multi cultural student population; accountability demands and new generation of teachers; teacher power through associations and unions; need for developing linkages with parallel structures, community, NGOs and civil society call for greater transition on the role of School Principals, especially when they have been following conventional management practices and classroom transaction but with a slight change in the curriculum (National Curriculum Framework, 2005). Managing this transition calls for the need to adapt decentralised approach in education system. The paper asserts that School Leaders are of crucial importance for continued improvement of schools provided onus of taking decisions for schools should lie with them. Empowering our School Leaders who can take school-based decisions (may not include financial autonomy) necessitates vital decisions at the policy level. In this context, the paper will discuss about what policy decisions needs to be taken up in a hierarchical and bureaucratic model and in what areas capacity building exercises will help in sustaining leadership to meet the demands emerging from social and educational scenario.

* *Associate Professor*, NUEPA, Sri Aurobindo Marg, New Delhi 110 016

Introduction

India has achieved major milestones in the educational scene and societal expectations for the past 10-15 years. The flagship programme of Sarva Shiksha Abhiyan (SSA), the international level Dakar Declaration on Education For All (EFA) and the Millennium Development Goals (MDGs) and recently Rashtriya Madhyamik Shiksha Abhiyan became instrumental in creating an array of educational institutions and access of social groups to schools under different managements. The massive social mobilisation drive under the auspices of the National Literacy Mission, consequently led to significantly reshaping education by increasing the demand for education. The impact of societal changes could be on schools through several initiatives like early childhood education, multi language and multi cultural student populations, emphasis upon rights of students, new generation of teachers, teacher power through associations and unions, community in an adversary role, rise and fall of financial support, economic and pragmatic accountability demands, educational technology including computers, audio-videos etc, demand for social justice in education, student unrest, drug abuse. These changes placed larger implications on the role of school Principals who were caught up in making schools receptive to the demands and expectations of more conscious society.

The Era of Change: Challenges for School Leaders

On the recommendations of Education Commission (1964-66), NPE (1968), NPE (1986) and further revised policy in 1992 supported adoption of Common School System in the country to promote social cohesion and national integration. It was emphasised that efforts should be made to improve the standard of education in general schools. All special schools like public schools should be required to admit students on the basis of merit and also to provide a *prescribed* proportion of free-studentships to prevent segregation of social classes. In the present changing scenario where move to decentralisation has begun in the school sector, still Common System seems to be utopia. Inspite of policy decisions, the schools are still governed by the same rules and old conventional styles, without understanding that all schools can not be the same. Several challenges have largely remained unchanged but expectations on School Heads have undergone radical change.

Hierarchical Schools and Divisions in Social Groups

The phenomenal growth of the total number of schools have led to proliferation of a range of schools, which in turn led to widening class distinctions in the country. This segregation is increasing and tending to widen the gulf between the classes and the masses. Reviewing the experiences of SC and ST community children in the school system, Ramachandran (2004: 27) stated, "The process of increased universalisation is accompanied by growing segregation by class, caste and gender".

The elite, middle and higher income groups access exorbitantly high fee charging *quality institutions.* Almost top

ten percent middle class parents *make great sacrifices* to send their children to schools beyond their means. The Heads of these schools face constant pressure of providing higher quality education from other parallel structures emerging as a result of privatisation. The competition forces them to upgrade curriculum to bring their children at par with International Baccalaureate schools.

The middle income groups have access to private-aided and government-aided schools English-Language schools. These schools are mushrooming in several locations but with quality in question. The teachers in most of such schools are under qualified and untrained and facilities of laboratories are limited. Managing curriculum and classroom teaching and processes within the framework of National Curriculum Framework, 2005 of NCERT becomes a major challenge for Leaders including Principals in these schools.

And on the bottom rung is poorly managed local body, government or municipal schools, which cater to children of the poor. The low income groups send their children to these schools but are at risk of constant dropping out without completing full primary school cycle with high incidence of failure and low transition from one stage to another. The incidence of silent exclusion is high among first generation learners, orphans, child-labourers, street children and victims of riots and natural disasters. Bringing such children to school and retaining them through completion of the primary school cycle continues to be the challenge facing School Heads.

Quality and Sustainability of Under-resourced Schools

Small-sized schools with enrolment less than 50 and even 25 managed by a single or two teachers and single classroom schools in multigrade settings are posing threat to quality issues in schools. The challenges for the teachers who are also Head Teachers in these schools are much higher in rural areas where schools become non functional on most of the days in an academic year. To a great extent, an increase in single-room and single-teacher schools which invariably have inadequate physical and academic infrastructures (see Blum and Diwan, 2007) are having serious implications on managerial roles of School Heads, who are mostly found combating with the absence of basic inputs like teaching-learning materials even textbooks, low learning and achievement levels, shabby classrooms, poorly functioning schools, high teacher absenteeism, inadequate funds, limited facilities, and absence of need-based teacher training etc . School Heads are also caught up in situations where management of mid day meals, livelihood and health guarantees to level out the initial disadvantages of the poor in the educational sphere stemming from malnourishment, poverty, and health-related debility. School Heads are confronted with day to day struggle accruing from strong political interferences resulting in teacher transfer and teacher absences. *Poor schools for the Poor* adds to the creation of demotivated human resources, placing Head Teachers in cross roads.

EGS Centres or alternative schools, another form of small-sized schools

function as transitory facilities until they can be replaced by formal government primary schools. The centres are opened in habitations with at least 25 out-of-school children in the 6-14 age group (or the 6-15 age group in case of hilly, desert and tribal hamlets). The guruji or teachers or instructors in such centres are recruited by local self-government bodies and are managed locally. Local politics reigns supreme in such small schools. Teachers, who are themselves products of the poor education system, are often seen as obstacles to educational change rather than as key human resources. The attempt to build ordinary schools into quality institutions puts School Heads on treadmill particularly in rural areas.

Fragmented Policy on Teacher Appointment and Curriculum Transaction

The appointment of *Shiksha Karmis* as policy in locations where regular teachers are reluctant to go, such as tribal or backward villages and other deprived areas is posing another challenge for School Heads. These para teachers appointed on contract basis tend to be used as low-cost substitutes for non-performing teachers, often managing the entire school on their own. This policy is often supported by regular teachers who, as a result, are more likely to be posted to more attractive areas. This results in deprived children being taught by poorly-qualified, low paid *Shiksha Karmis*, while those from more privileged families are more likely to be taught by a fully qualified teacher (PROBE, 1999). Regular school teachers are not necessarily better than contract teachers. Problems relating to classroom processes, pedagogic techniques, classroom management and other constraints affect the schools especially when para teachers, the most demotivated class begun to demand confirmation after they put in reasonable period of time. Ramachandran et al (2005) in their study on teacher motivation, for example, found that the teachers are 'forced' to teach children of poor communities and specific social groups who are 'dirty' (which seems to reflect a class/social bias in teachers). A school without adequate numbers of teachers is non-functional, but a school which has an adequate number of teachers who are neither empowered nor motivated with low morale and self-esteem, are likely to do more damage than good to students (Nawani, 2008). The implications on the role of School Heads in such daunting situations are a matter of concern.

Some states have chalked out state curriculum within the framework of NCF 2005 but School Heads are grappling with the issue pertaining to policy decision on appointment of teachers, their preparedness to face the challenge in the absence of need-based professional and capacity building programmes and preparation of text books.

Demand for Right To Education

The recent *The Right of Children to Free and Compulsory Education Act, 2009* legitimising the right of each child to have access to good quality education is a major breakthrough in school education. The act proposes:

- Special provisions for children not admitted to, or who have not completed elementary education.
- As per norms and standards for a school (Section 19).
  - ➢ Grades 1 to V, the schools have been assumed to be having teachers not less than two for different enrolment classifications.
  - ➢ Grades VI – VIII at least one teacher per class for each subject – Science and Mathematics, Social Studies and Languages. Provision of atleast one teacher for every thirty five students and one full time additional head teacher where admission of children is above hundred.
- Constructing
  - ➢ All weather building consisting of one classroom for every teacher and an office-cum-store-cum-Head Teacher's room
  - ➢ Barrier-free access
  - ➢ Separate toilets for boys and girls
  - ➢ Kitchen where mid-day- meal is cooked in the school
  - ➢ Playground
  - ➢ Boundary wall or fence, for securing the school building.
- Teaching Learning Equipments shall be provided to each class as required.
- Play material, games and sports equipments shall be provided to each class as required.

Clause 19 (2) of this Act talks of the schools established before the commencement of the Act does not fulfill the norms and standards specified in the schedule, it shall take steps to fulfill such norms and standards at its own expense*s, within a period of three years from the date of such commencement.* The implication on centre-state financial share is being worked out with complete details on the requirements of human and physical resources in schools. Implementation will entail greater planning of School Heads as per the requirements and priorities of each school. The exercise eventually is expected to put additional responsibility on the School Head in managing the resources as they will be confronted with new administrative and financial matters. This will call for autonomy and freedom coupled with newer responsibilities and expectations.

The Act mentions about School Development Plans, the ultimate goal with more focus on certain areas of school management like physical facilities, teacher training, inspection of schools, monitoring follow up etc., placing larger implications on school-based decisions for improvement. There will be a need for better equipped School Heads to address challenges on several grounds in the management of schools. The schools need to be recognised as *matter of heart and School Head as the key driver of change.* Empowering School heads will necessarily require support and guidance of key level decision-making authorities.

Addressing Change: Need to Empower School Leaders

In view of the likely emergence of changes in management systems NPE (1986) strongly recommended decentralisation and the creation of a spirit of autonomy for educational institutions. The proactive manner in which the Government of India has acted

following the adoption of the National Policy on Education 1986 stands out as a landmark innovation in educational policy. The resultant factor came to view with different innovative reforms coming up in the country and decentralised planning being one of them. Adoption of decentralisation in most of the states impels shift from 'state' as a unit of planning to 'districts' as the lowest unit for planning and management for basic education programme. This includes increased community involvement in implementation and monitoring of education programmes; and participation of Panchayati Raj Institutions and Urban Local bodies in planning and management of education. There has been also a mention of institutional planning followed to some extent in very few districts but somehow freedom to schools for teacher selection or public examination or financial matters is yet to be seen in Indian schools. Decentralisation and community empowerment continue to be rhetoric to consider the role of the School Head in school management as critical; the ground reality is altogether different. The Indian schools functioning under separate managements share common centrally-dictated core issues like curriculum, structured instruction, and board examinations etc. which are uniform for all schools. There may be few exceptions but on the whole the place of the government School Head is invariably at the lowest rung in the official hierarchy, and commands practically no authority even within the school. An emerging factor that is likely to change social perceptions about School Head in a significant manner is the move to empower them to take decisions for the betterment of the school they belong to. It has now come to realise that until people who actually belong to the system are involved in decision-making, no improvement can take place. The school-based management in Australia, Canada, Singapore, USA, UK's 'Local Management of Schools' and 'Grant Maintained Schools' on the practices of School-Based Management, Hong Kong's "The School Management Initiative", New Zealand's "Tomorrow's Schools and Charter Schools" have shown that School-based management and initiatives have enhanced accountability and commitment among school practitioners including heads as they begin to own the school and their relentless efforts improve their status within the system. In most of the developing and developed countries where SBM has been adopted in one or the other form, the extent of practice followed *in the real sense* is still not determined. As per the estimation of 14 countries, Meuret and Scheerens (1995) revealed that the proportion of decisions taken at the School Level is Ireland and New Zealand practices greater than 70%, Sweden 48%, Australia, Denmark, Finland and Portugal 38 to 41%; Belgium, France, Germany, Norway, Spain and United States, 25 to 30% and Switzerland 10%. In the Seminar on Management of Schools by Head Teachers at Shanghai, China (2000), an exercise to chalk out modalities for making SBM successful in Asian countries was done. It was brought recommended that success of SBM largely depended on the following factors:

- The characteristics of effective school principals and conditions in which they can play a leadership role.
- The roles and responsibilities of the other members of the school senior staff in an effective school.
- The different tasks of headteachers and the ways in which they and other senior staff reconcile administrative with pedagogic duties.
- The potential of institutional planning to improve school functioning (through school development plans and school self-evaluation programmes).
- Role played by external supervision and support services to improve school management by principals.
- Innovative strategies that have succeeded in mobilising and organising community support.
- The way the headteachers use information and data to improve the management of their school.

The roles and responsibilities of School Heads in contemporary times is quite different from traditionally organised schools. The School Heads have become prime movers in designing and implementing development plans bringing school-based improvement programmes dependent on personal initiatives and strong interpersonal relations with teachers, children, parents, community members, the departmental authorities, civil society, NGOs and private service providers.

Preparation for Newer Responsibilities

Since the School Head forms an integral part of the system, designing a complete programme of action for schools within the decentralised framework will help in chalking out a roadmap for adapting the complete package. The entire exercise entails core competencies required to be developed, roles and responsibilities to be redefined and kind of training and capacity building to be identified.

Collection of Base-line data for School Development Plans

The beginning needs to be made by understanding the individual school by following a set of cardinal steps like diagnosis of problems, identification of particular needs, assessment of the limitations and resources. Based on such an assessment, school-based priorities, goals, standards and even targets can be maintained in the following areas:

- Enrolment, attendance, retention and participation of students in school affairs.
- School environment to make it more child "friendly" and welcoming to their parents.
- Levels of student achievement in internal and external examinations;
- Academic, and infrastructure facilities in the school.
- Student discipline and health status.
- The special needs of disadvantaged, marginal, and hard to reach segments of student population such as girls and children with physical and mental disabilities.

Based on base line assessment, a school's development plan can be prepared with active participation of School Management Committee under the leadership of School Head in the light of clause 22 (1) and (2) in RTE 2009.

Identifying Core Competencies

Viewing school in a decentralised framework vested with autonomy and freedom to enjoy power with authority, the competencies expected of personnel at every level needs to be revisited and examined from three angles: (i) Changing behavioural orientations. (ii) Restructuring curriculum, instructional practices, classroom transactions, modalities etc. (iii) Assessment, monitoring and evaluation of educational programmes. An illustrative list of such competencies could be as follows:

- Creating an environment in which all policy makers, decision making authorities, Education Officers, BRCs, CRCs, practitioners are able to articulate a vision of their individual schools, describe characteristics of each and cause the conditions that promote each of them.
- Redefining roles and responsibilities of all personnel functioning at every level of school management.
- Goal Setting – Stating explicit goals for quality improvement.
- Exceeding to Clientele needs as per their mental- physical level, living conditions, and facilities at home and within the available resources in the school.
- Locking the schools in the cycle of continuous improvement in instruction and curriculum.
- Use system thinking to continuously improve performance within a school.
- SWOT analysis of all decisions taken at every level.
- Using a standard- based accountability system to drive curriculum and instruction and measure student progress for creating a sense of belongingness and ownership among staff.
- Leadership beyond Administration.
- Professional Development of Human Resources.
- Promoting research by practitioners.
- Shaping a culture in which norms, values and beliefs that manifest powerful learning.

Redefinining Roles and Responsibilities

According to the growing body of implementation research, the major impact of autonomy is that the roles of all educational stakeholders- Decision and policy makers Education Secretaries, Commissioners; State and district level Education Officers, other central office personnel, Block Resource Coordinators and Cluster Resource Coordinators and at the institutional levels, principals, teachers and often parents, community members and students—are profoundly affected.

At Policy Formulation Level

- Allow greater flexibility in the areas of budget and personnel.
- Offer direction for curriculum and instruction reform.
- Allocate funds for professional development and training at district and institutional levels.
- Invest in building a district-wide computer network.
- Encourage experimentation and innovations.

At the State Level

- Monitoring and Supervision of schools in ensuring quality for

improving teaching processes and learning achievements.

- Auditing of the school finances.
- Authorising certain allocations of a given amount of money to achieve targeted outputs.
- Supervising and assisting in necessary technical aspects in relation to infrastructure, laboratories etc.

At the district level

- Teacher transfers.
- Administrative work in the capacity of approving extensions of teachers after 58-60 years of age.
- Dealing with the retirement formalities of teachers or disciplinary scrutiny.

At the block level

- Teachers salaries.
- Recommendations on extensions of temporary/ para teachers or teachers after retirement.
- Disciplinary inquiry of the schools on the request of District Education Officers and other personnel functioning at the district level.
- Teacher transfers and other administrative tasks for which schools need their help or when approached by district officers for special tasks concerning finances/ accounts related to a particular school.

At the Institution level

For School Heads

- Developing vision for the school: crucial role of school Heads in managing an autonomous school.

- Looking autonomous schools in the futuristic perspective.
- To help in playing multi faceted roles as : facilitator, strategic planner, instructional leader, the key player in developing and sustaining school climate, a developer of future school leaders, aligning resources and outcomes.
- Ensuring equality and quality of education.
- Planning, organising, implementing and executing tasks expected of them as per the new policy on school autonomy : academic, personnel and financial.
- Academic functions in the light of admission of students, curriculum planning and management, instructional modalities, organisation of co curricular activities, examination and evaluation etc.
- Personnel functions in the light of personnel records, staff development, staff welfare, dealing with teachers' association/union, job allocation and management, conducting staff meetings, staff selection etc.
- Financial functions in the light of budgeting, Mobilisation of Resources, Resource Utilisation, Maintenance of Accounts, Monitoring etc.

For School Teachers

- Ensuring commitment and accountability towards teaching profession.
- Assuring quality that could begin from a small dimension of classroom

transaction and move onward for total quality improvement programme.

- Enhance and exhibit creativity.
- Being innovative and develop knowledge, skills, attitudes and values.
- Change the pedagogical role and act as a facilitator for students not as a subject specialist but as a counselor on whom children can fall back upon when faced with syndrome arising from emotional disturbances.

Training Areas

Professional development needs to be continuous and school-based. Districts need to present clear guidelines over decentralisation of powers and decision making over budget, staffing and curriculum and school heads simultaneously need to be equipped to be able to lead and share power and responsibility. In order to facilitate them to deliver their tasks in the most efficient manner, the areas that require training, needs to be clearly identified.

State and District Personnel

- Develop a clear design for academic standards and aligned assessments of student performance.
- Sustained investments in strategies for school improvement.
- A public outreach strategy that engages schools, students and community.
- District offices need to get involved with schools to assess personnel needs; at funding not only the allocation but also how those funds are being used; and at instructional materials and facilities. They need a specialised training in assessment, monitoring and evaluation issues.
- Development of a coherent system of instructional guidance at the state level includes such elements as curriculum framework, instructional materials, professional development activities and assessments. The state personnel need to be equipped in providing concrete tools for teachers, schools and districts to use as resources as they construct their curriculum design, instructional strategies, promote professional development and evaluation progress.
- States and districts need to work collaboratively with high schools and higher education departments to help build a qualified teaching force where teachers find themselves committed to continuing professional development. This needs structural changes to gain control of chaotic learning environment. This requires specialised training for education personnel at state and district levels.
- Local policy makers help to offer training principals acquire skills necessary to support a positive learning environment.
- Partnership and coordination with teacher unions is another component that needs to be taken care of. Strategies can be developed to involve colleges and universities to help create curricula and resource persons at districts levels or from other training institutes.

Districts can use information from teacher union representatives active on the review and intervention teams that evaluate schools and mandate corrective actions to improve teaching and learning in routine schools and not so good functioning schools.

• Developing strong database for providing continuous capacity building is an area where districts can help schools to set stage for change. Schools definitely require extensive help from district staff in interpreting and using assessment data. District personnel need training to help schools pursue data-driven improvements in the framework adopted by successful schools.

• Providing information and training to schools through clear guidelines about the following:

- the role of school and extent to their authority;

- content knowledge about student and overall school performance, policies, programmes, budgets, facilities, local and state regulations and other areas in which they will be expected to make or influence decisions; and

- skill training in-group process, such as problem solving, decision-making, conflict resolutions etc.

School Heads

Capacity building for key areas of decision-making first calls for identification of areas where interventions of school heads are essential for managing autonomy in Schools. This could center around the

Empirical studies on Nicaragua which identifies the following areas:

• Salaries and Incentives.
- Setting salaries
- Establishing incentives for teachers
• Maintenance and Infrastructure.
- Maintaining the school
- Developing infrastructure projects
• Personnel Planning and Preparing. School Budget.
- Hiring and Firing Teachers
- Setting goal for the school
- Hiring and Firing administrative personnel
• Classroom and Pedagogy.
- Selecting textbooks
- Providing textbooks
- Distributing textbooks
- Informing community about school activities
- Determining class size
- Accrediting new schools
- Designing the curriculum
- Defining the educational plans and programmes
- Relations with teachers' union
- Pedagogical supervision and evaluation
• Teacher Supervision and Evaluation.
- Determining school hours
- Evaluating teachers
- Setting the school calendar
- Supervising teachers
• Training Teachers.
• School Administration.
• Training in vision, the leadership and the cohesiveness and working together involving community and parents, developing support with staff, respect for parents. These although seem quite theoretical but

these do not always happen. Special skill based training on behavioural management needs to be incorporated.

- Training for effective utilisation of leisure activities for secondary school children. At this stage, children tend to trap themselves in anti social activity.

- Training for management of finances and funds is a major focus. Decisions about resource mobilisation and allocation require tough choices. Creating a true focus on learning in a school may cost jobs and major shifts in financial resources. Principals need to pay attention to how they allocate staff, budget, material and space. School autonomy require judicious decisions on additional resources on para professionals, rich teaching-learning materials and resource persons to support a school's instructional focus.

- In order to equip schools take over the "consumer approach" looking for ways to improve so that parents and children would find it attractive is a critical area where head needs training to make school move from instruction based on remediation to accelerated learning of all students, developing innovative programs that come from team planning, problem solving based on data and a process of continuous learning through professional development.

- School autonomy requires strategic planning that include setting the direction for the school, formation of partnership agreements, work force

plans and preparation of schools annual operational plan and annual report. The school principal responsibility for staff management and supervision as well as daily functioning of the school needs professional training in this important aspect. It is the school head who can then become instrumental in building communication of learners where principal, teachers and parents become learners along with their students.

Teachers

- A professional development programme that helps teachers to improve classroom practices and student achievement.

- Teachers' professional development is instrumental in enhancing student performance. This calls for equipping them to assume responsibility as well as power to take initiative in school improvement under school autonomy.

- Sharpening teacher clarity about instructional purpose and method and in the end to increased instructional effectiveness leading to considerable improvement in student performance.

- The process of establishing a common vision can be a capacity building endeavour. This requires specialised skills as it fosters partnership of school with various stakeholders that can serve to increase resources available for the reform efforts. Generating a unifying vision can be an intense learning experience for teachers and others

that form an integral part of the school tasks and has to be emphasised as important themes in all training programmes of the training institute.

• A close examination needs to be done of the experiences of best practicing SBM schools about the capacity building of their staff to target SBM energies towards school restructuring. An example from Canada can be adapted. Some of the best functioning SBM schools offered stories of cross-role training where teachers of similar positions have been trained together, they were sharing information across classrooms and their working as teaching teams. Then on the job training for instructional guidance through focused interactions served as resource to school, providing a direction for school-based change. Such schools had been active in establishing strong ties with organisations and associates outside the school for professional development and information sharing

Conclusion

The efficiency of a school is determined by the strength of a school to meet expectations of people it caters to. On the one hand, elite social class has their own expectations towards schools and on the other the ignorant in rural settings and unauthorised and slum cluster inhabitants in urban surroundings have their own specific demands. It has become quite challenging for the head of a school to maintain equilibrium between knowledge society and ignorant classes on the one hand and practical problems in implementation of programmes for reform efforts on the other. Many schools placed in similar situations appear to have tackled these problems effectively by galvanising the single instrument in hand, that is gearing the internal management of school by empowering School Head to take decisions for their schools. Now since the country is moving towards decentralised school governance, this could not have happened at school level alone, but would require streamlining the involvement of policy decision makers at state, district, block and cluster levels. This necessitates stimulating conditions that foster the School Head to take charge of the school through redefined roles and responsibilities coupled with well designed training programmes of all the personnel functioning in hierarchal positions. Finally, school-based improvement largely hinges on the effectiveness of the School Principal – his or her vision, human relations and professional competence and confidence.

REFERENCES

BLUM, N. and DIWAN, R. 2007. *Small, Multigrade Schools and Increasing Access to Primary Education in India: National Context and NGO Initiatives*. CREATE Pathways to Access Research Monograph No. 17. CREATE and NUEPA: New Delhi/Falmer.

GOVERNMENT OF INDIA. 2009. *The Right of Children to Free and Compulsory Education Act*, No 35 of 2009, The Gazette of India, Extra Ordinary Part II, Section 1, New Delhi, Thursday, August 26.

LALL, MARIE. 2005. *The Challenges for India's Education System*, Briefing Paper for Asia Programme, Chatham House.

NAWANI, D. (forthcoming) *Pedagogy and Pedagogue: Factors Impacting Access.*

EQUITY AND TRANSITION OF ELEMENTARY SCHOOL CHILDREN. CREATE Pathways to Access Research Monograph No. 37. CREATE and NUEPA: New Delhi/Falmer.

PUBLIC REPORT ON BASIC EDUCATION IN INDIA (PROBE). 1999. New Delhi: Oxford University Press.

RAMACHANDRAN, V. (ed.) 2004. *Gender and Social Equity in Primary Education: Hierarchies of Access,* New Delhi: Sage Publications.

Study on Initial Teacher Education Programme at Secondary Stage

S. K. Yadav*

Abstract

The government has initiated several educational measures like District Primary Eduation Programme and Sarva Shiksha Abhiyan. The NCERT provides support and technical assistance to a number of schools in India and oversees many aspects of enforcement of educational policies. The National Policy on Education (NPE) 1986 has provided for environmental awareness, science and technology education introduction of traditional elements and strong teacher's preparation through preservice and inservice programmes. The National Curriculum Framework 2005 also emphasises that the teachers have the ability to think and take decisions on their own and they can inspire students to be creative and imaginative. The teacher should reflect professionalism in the process of training and teaching. The Teacher training programme should be made strong and thorough review and overhauling of teacher education programmes is required. The study brings about the status of a preservice at secondary stage in India. It also highlights the actions to be taken to strengthen the initial teacher edcuation programme in order to provide quality education at secondary school level across India.

Introduction

There is dire need for initial teacher education for preparing professional and humane teachers at secondary stage that can in turn improve the quality of school education and also improve the quality of life of the people, society and nation. It inculcates the necessary pedagogical skills, knowledge and competencies among the secondary teachers and makes them professionally competent to meet the demands and challenges of the society. The initial teacher education system in our country has large dimensions in terms of administrative and organisational structure at different levels, policymaking, academic inputs, regulatory mechanism, financial powers etc. The Govt. of India made lot of efforts to improve the quality of initial teacher

* *Professor*, Department of Teacher Education & Extension, NCERT, New Delhi 110 016

education programme particularly after independence. During, 1947-48 only 51 institutions existed at the secondary stage where as the number of these institutions have increased more than 11000 at present. Like wise many Committees and Commissions were set up for strengthening the system of teacher education during this period.

The University Education Commission (1948) recommended that theory and practice of pre-service teacher education must support each other. The theory courses must be flexible and adaptable to local circumstances. The Secondary Education Commission (1952-53) recommended the adoption of new techniques of evaluation and suggested that more capable and intelligent persons should be attracted to the teaching profession. Education Commission (1966) recommended that quality of training institution and teacher education programme should be improved. Isolation of teacher training colleges from the mainstream on national life, from the academic life of the universities, schools, other teacher training colleges and very community which they are suppose to serve should be removed.

The Chattopadhyay Committee Report in (1983-85) recommended that minimum length of secondary teacher training should be five years after class XII. Reiterating the need..... "To enable general and professional education to be pursued concurrently", the commission recommends that.... to begin with we may have an integrated four-year programme. The National Policy on Education (NPE) and Programme of

Action (POA), 1986, 1992 (revised) calls for overhauling the teacher education system. NPE (1986) made three recommendations i.e. (i) teacher education as a continuous process and its pre-service and in-service components are inseparable, (ii) the need for new programmes of teacher education to meet the thrusts envisaged in policy and (iii) the need for creating new structures and strengthening institutions to concretise the vision of NPE. In the light of the recommendations of NPE (1986), a centrally sponsored scheme of restructuring and reorganisation of teacher education was taken in 1987, to create a viable institutional infrastructure, academic and technical resource base for continuous upgradation of knowledge, competence and pedagogical skills in school teachers by organising orientation and training programme. Under this scheme 31 Institutes of Advanced Studies in Education (IASEs) and 104 Colleges of Teacher Education (CTEs) were established so far. In 1990, the Achraya Ramamurti Committee suggested that the training programme should be competency based and there should be integration of theory and practice. The National Council for Teacher Education (NCTE) was established as a statutory body in 1993 by an Act of Parliament for maintaining norms and standards in the country. The NCTE brought out Teacher Education Curriculum Frameworks for during 1998 and 2009 which provides guidelines for the organisation of curriculum for different stages of teacher education. The curriculum reflects the realities of the national life, strives to realise the

interdisciplinary goal of education, attempts to establish a viable integration of theory and practice of education and provides varied educational experiences needed by a teacher in his work place besides these; two year duration was suggested for initial teacher education programme. The University Grants Commission (UGC) developed model for curriculum for teacher education during 1990 and 1991 at secondary stage. The National Curriculum Framework (2005) recommended that teacher education programme to be recast to reflect professionalism in the process of training and teaching. It must become more sensitive to the emerging demands from the school system. In the light of the above recommendations, the efforts were made by the government from time to time to bring changes and improvement in the initial teacher education programme. However, the following four models of initial teacher education for secondary teachers are working in our country:

- Four year Integrated B.A./B.Sc B.Ed Programme.
- Two year B.Ed programme.
- Two year B.Ed programme through distance mode.
- One year B.Ed programme.

Four year Integrated B.A/B.Sc and two year B.Ed programmes are run by Regional Institutes of Education of NCERT at Mysore, Bhopal, Ajmer, and Bhubaneswar. Another two year B.Ed programme is run through distance mode by IGNOU, New Delhi. But the one year B.Ed programme is largely being run by all the universities and affiliated institutions in the country. Regarding this course, there are common feelings that it does not prepare professional

secondary school teachers. It also does not provide enough time and opportunity for self-study, reflection and involvement, engagement with teachers, school, classroom and pedagogic activity and rigorous theoretical study. In actual practice duration of B.Ed course varies between three to seven/eight months. Keeping the above into consideration, the present study was undertaken to study the strengths and weaknesses of this programme.

Objective of the Study

The major objectives of the study are as follows:

- To identify different issues of initial teacher education programme (B.Ed.) of one year duration at secondary stage in different States/UTs.
- To study different components of initial teacher education programme (B.Ed.) of one year duration at secondary stage in different States/UTs.
- To derive implications for overall improvement of initial teacher education programme (B.Ed.) of one year duration at secondary stage in different States/UTs.

Sampling

The pre-service teacher education (B.Ed) programme at secondary stage is being run in all the States/UTs. These B.Ed institutions are affiliated to different universities of respective States/UTs. The sample of the study consisted of 17 Principals, 65 teacher educators (32 males and 33 females) and 138 student teachers (43 males, 95 females) from 17 B.Ed institutions of ten states namely Haryana, Uttar Pradesh, Tamil Nadu,

Mizoram, Himachal Pradesh, Assam, Rajasthan, Madhya Pradesh, Jammu & Kashmir and Gujarat.

Tool Used

The following tools were developed to seek the information about the various components of one year B.Ed programme from different states.

1. The first **questionnaire related to Principals** of the B.Ed institutions was developed to ascertain their perceptions about various aspects of B.Ed programme. It consisted of 36 items related to general information of the institutions, faculty profile, admission procedure, curriculum development, curriculum transaction and its evaluation etc.

2. The second **questionnaire for teacher educators** was developed to seek their perceptions regarding strengths and weaknesses of B.Ed programme and also about other components. It consisted of 32 items related to structure, duration and components of curriculum, transaction of curriculum, course evaluation, teacher educator professional development etc.

3. The third questionnaire was **for student teachers**. This questionnaire ascertained the perception of student teachers/ teacher trainees of initial teacher education programme (B.Ed) at secondary stage. It consisted of 30 items which aimed at seeking student perception about the curriculum of the programme, curriculum transaction followed by teachers, ICT and other facilities available in the institute, organisation of co-curricular activities and evaluation system.

   All the three questionnaires were tried out and finalised on the basis of experts opinions.

4. Focus Group Discussion with principals, teacher educators and student teachers were held on the major issues of one year B.Ed programme during data collection.

5. During data collection, field notes were also taken.

Data Collection

The data were collected by mailing all the three questionnaires to the B.Ed institutions in different states. The efforts were made to get the filled in questionnaires from all the states/UTs. Beside this, some of the B.Ed institutions were visited and data were collected personally from principals, teacher educators and student teachers. During these visits focus group discussion were held with them and field notes were taken about the different component of B.Ed Programme.

Analysis of Data

The data were scrutinised, classified, compiled and analysed variable wise. The descriptive analysis of data was carried out. The syllabus and curriculum of one year B.Ed programme from all the states were analysed to validate the information provided by the institutions.

Results and Findings

The following results and findings are derived on the basis of the analysis of the data

Recruitment & Promotion

Lecturers, Readers and Principals of

B.Ed colleges were recruited through open selection by Colleges of Education, Universities or Public Service Commission. The procedure for promotion from the post of Lecturer to Reader and Reader to Principal was based both on open selection as well as under Career Advancement Scheme.

Staff Position

It was found that about 50% post of Lecturers and other faculty positions were lying vacant in these institutions.

Admission

Graduation degree was the minimum qualification for seeking admission in B.Ed programme. Entrance test was also conducted in some universities for admission purposes while in other places, it was based on merit only. But the teaching aptitude was not considered in the entrance examination.

Management

- The B.Ed colleges were managed both by the Government and Private bodies in all the states.
- The B.Ed programme was regulated by National Council of Teacher Education (NCTE) in the country to maintain the norms and standards of the programme.
- In all the states, the B.Ed institutions were co-educational and some of these were having residential facilities.

Curriculum Development

NCTE, UGC and NCERT were responsible for preparing NCF policy for secondary teacher education.

The B.Ed curriculum and syllabus were not revised during last more than five years in all the states. The Curriculum Framework for Teacher Education was brought out during 1998 and now after eleven years another framework was brought during 2009. No definite policy was evolved for revision of B.Ed curriculum and syllabus. Similarly no definite policy and role was specified for the involvement of the faculty in formulation and development of the curriculum and syllabus. However, some of the faculty members were involved in the process of curriculum development.

Most of the Principals and teacher educators expressed that there was no co-ordination between the school curriculum and B.Ed curriculum.

Theory Papers

- The compulsory theory papers prescribed in B.Ed programme were almost common in all the states. The papers namely Educational Psychology, Sociology of Education, Guidance & Counselling, Educational Measurement & Evaluation, School Organisation, Computer Education & issues related to secondary education were prescribed in B.Ed course.
- Health and physical education, yoga and value education, work experience music, art & craft, computer educations were prescribed as additional courses of B.Ed programme.
- It was expressed by most of the student teachers that more emphasis was laid on the theory

courses than practical work. They also revealed that the curriculum was lengthy and content in many subjects was not required.

Practical Work

- Most of the respondents expressed that computer application, psychological tests, art & craft, work experience, practice teaching, research projects, assignments and social work were prescribed under practical work.
- About 80% student teachers expressed that the practical activities were very useful and made teaching learning interesting. The work experience, performing and visual arts increased their confidence, brought hidden talent outside and made them tension free. It also helped in developing their personalities. The necessary knowledge and skills related to subject matter were inculcated by these activities.

Computer and ICT

- The computer labs were established in 60 to 70 per cent of the institutions.
- The computer literacy among Principals and teacher educators was between 30 to 40 per cent and it was less than 20 per cent among the student teachers.
- ICT based classrooms were not available.

Practice Teaching

- The duration of school experience programme was between 25 to 40 days. Student teachers were prepared for practice teaching before sending them to actual classroom situation.. Simulated and microteaching lessons were organised.
- Practice teaching was organised in all types of schools including government, private, aided and own demonstration schools during first and second half of the year.
- The subjects like social sciences, physical sciences, languages and mathematics were prescribed under teaching practice of B.Ed programme.
- The student teachers had expressed that two subjects were undertaken for the practice teaching. About twenty to twenty five lessons from two subjects were delivered during practice teaching by student teachers.
- Most of the respondents revealed that the duration of the practice teaching was less. It was not supervised properly. The school authorities also did not co-operate fully in organising the teaching practices in their schools. It was difficult to observe the natural behaviour of student teachers during this programme.

Co-curricular Activities

- The co-curricular activities like debate, study tour, social activities, drama, health awareness programme, excursion and science fair etc. were organised as a part of course.
- About 50% student teachers expressed that physical education helped in the development of their personalities.

Transactional Strategies

- Most of the student teachers reported that lecture method was frequently used by the teacher educators for curriculum transaction in the B.Ed programme. Demonstration methods and group discussions were held on some occasions. Discovery and problem solving methods were used rarely.
- Most of the student teachers expressed that ICT facility was not used during teaching learning process.

Professional Development

About 90% teacher educators expressed that there was no policy for the professional development of the teacher educators. They were only deputed in orientation and refresher courses organised by universities and other national institutions in adhoc manner.

- About 30% teacher educators had published articles/papers in the field of school and teacher education. The articles were mostly contributed in MERI national journal like Journal of Education, University News, Journal of Indian Education, Indian Educational Review, Journal of All India Association for Educational Research, Journal of Education and Psychology, Nav Shiksha and Education in Asia.
- About 10% teacher educators had published books in the area of educational technology, computer education, teaching of mathematics, child psychology and total quality management in education during 2004-08.

Research and Innovation

As many as 10 % teacher educators had undertaken research and innovative projects in the area of school & teacher education.

Library

- Most of the stakeholder expressed that library facilities were available almost in all the B.Ed institutions but at many places, library was placed only one small room. Sitting arrangement in the library was not found proper and adequate in most of the libraries.
- The professional librarians were working in about 30% institutions and in the remaining institutions, the faculty members were made in -charge of the libraries
- About 90% student teachers expressed that standard books and materials related to B.Ed course were not available in the libraries. The cheap and sub-standard books were available almost in all the libraries.

Physical facilities

The physical facilities including Principal's room, staff room, classrooms, office space, laboratories and toilets in B.Ed institutions were available and adequate in most of the institutions. But the physical facilities like playground, computer room, student's common room and gymnasium were not adequate.

Examination and Evaluation System

- Both annual and semester system for examination were followed. Marking system was prevalent for

theory and practice teaching & grading system was followed for practical work examination.

- The performance of the student teachers in theory courses was evaluated by conducting external and internal examination. Written tests, viva-voce and assignments were largely used as tools for examination. Practice teaching was evaluated by observing and supervising the delivery of the lesson plans in real classrooms. The evaluation of the practical activities was based on construction of psychological tests, assignments and projects.
- Most of the respondents reported that the existing tools and techniques for evaluation of performance of students were traditional and outdated. These techniques were used only for the evaluation of cognitive aspect of the personality of the student teachers.

Specific Curricular Inputs

Specific curricular inputs like provision of scholarships & remedial teaching were provided for the disadvantaged students.

Miscellaneous

Besides above findings, the following were also expressed by most of the respondents.

- The duration of one year for initial teacher education programme was found quite inadequate.
- About 30 to 40 per cent students were not attending the classes on regular basis particularly in self finance colleges.

- Many post for Principals of College of Education were lying vacant.
- New and innovative methodologies were not used for transacting the curriculum.
- Practice teaching was not organised on professional lines and what was done during programme was stereotyped.
- The initial teacher education programme was theory oriented and there was no integration between theory and practice.
- The initial teacher education programme was isolated from the community.
- The student teacher faced lot of problems related to inter-college migration.

Implications for Action

The following implications for action have been drawn on the basis of the findings mentioned above.

- The one year duration of the initial teacher education programme was found quite inadequate and very less. It should be increased from one year to two years, so that the necessary knowledge and skills can be inculcated among the student teachers during this programme.
- There should be entrance examination for admission in B.Ed programme and it should be based on aptitude of the students. Written tests, group discussions and interviews should be the part of admission procedure. The weightage to co-curricular activities should be for given for admission criteria.
- Physical facilities including,

- common room, computer room, laboratories and toilets should be provided adequately, so that the quality of teaching can be enhanced.
- The library services should be provided in all the B.Ed institutions, with latest books and journals in adequate number. Well qualified librarian should be employed. Adequate space for library and reading room should be provided in the institutions. The computer and internet facility should also be available in the library. The library should have networking with other libraries.
- Well qualified faculty members including principals, teacher educators and technical staff should be appointed and vacant sanctioned posts should be filled. The same way, administrative staff should also be appointed. Promotional policies should be followed on regular basis.
- The schools and the teacher education institutions are working in isolation. Even, there is no relationship between the B.Ed curriculum and the school curriculum. Both the curriculum should have close linkages and co-ordination. The frequency for revising initial teacher education curriculum should be at least five years.
- During B.Ed course, more emphasis was laid on theory part than the practical aspects. All the theory papers prescribed in the B.Ed programme should give space to the practical work including assignments and projects.

- The duration of the practice teaching and school experience programme was not found adequate in the B.Ed programme. It should at least sixty days duration of the school experience programme. Student teachers should be prepared well before sending them to actual school situations. All the lessons should be supervised and monitored, either by the faculty of the institution or by the school teachers, where the school experience programme is undergoing.
- Lecture method was used frequently for transacting the curriculum of the B.Ed programme in all the countries. Besides this, project method, problem solving method, quiz, discovery method and case studies should be used in transacting the curriculum of B.Ed programme. ICT should be integrated during teaching learning process.
- The activities related to work experience, projects and assignments were not undertaken seriously. More activities like debates, social activities, drama, health awareness programmes and science fairs should be organised in more serious and systematic manner, so that student teachers can gain more exposure and experience during this programme.
- The performances of student teachers in the B.Ed programme were evaluated through annual and semester systems of examination. It is suggested that comprehensive and continuous evaluation should be introduced for evaluating the

performance of student teachers. Equal weightage should be given to school based experience and practical work. Grading system should be introduced in place of marking system.

• There was no regular policy for the professional development of faculty of B.Ed programme. Only some faculty members are deputed to the seminars and conferences in adhoc manner. Only very few are contributing articles/papers in the journals. There should be a regular policy for the professional development of the faculty members by organising orientation and refresher courses, deputing to national & international seminars. All the faculty members should get equal chance for their growth and development.

REFERENCES

MINISTRY OF EDUCATION.1948. *Report of the University Education Commission*, Govt. of India, New Delhi.

MINISTRY OF EDUCATION. 1952. *Report of the Secondary Education Commission*, Govt. of India, New Delhi.

MINISTRY OF EDUCATION.1964. *Education and National Development: Report of the Commission(1964-66),* Govt. of India, New Delhi .

MINISTRY OF HUMAN RESOURCE DEVELOPMENT.1983. *The Teacher and Society, National Commission on Teacher-1(1983-85),* New Delhi.

MINISTRY OF HUMAN RESOURCE DEVELOPMENT. (1986, 1992), *The National Policy on Education,* Govt. of India, New Delhi.

MINISTRY OF HUMAN RESOURCE DEVELOPMENT.1990. Committee for Review of NPE 1986, *Towards an Enlightened and Human Society (Part-1)* , Govt. of India, New Delhi.

MINISTRY OF HUMAN RESOURCE DEVELOPMENT.1993. *Learning Without Burden,* Govt. of India, New Delhi.

NCERT. 2005. *National Curriculum Framework*, NCERT, New Delhi.

NCERT .2006. *National Focus Group on Teacher Education for Curriculum Renewal* (Position Paper), NCERT, New Delhi.

NCTE.1998. *Curriculum Framework for Quality Teacher Education*, NCTE, New Delhi.

NCTE. 2009.*National Curriculum Framework for Teacher Education*, NCTE, New Delhi.

YADAV, S.K. 2003. "Research Perspective in Teacher Education", *University News*, 41, 22, June, 2-8, 2003, New Delhi.

YADAV, S.K and REHAN SUMBUL. 2006. "Teacher Education in India: Issues and Concerns", *University News*, 44, 38, September, 18-24, 2006, New Delhi.

YADAV, S.K .2007. "Professional Teachers in Higher Education", *University News*, 45, 09, February 26-March 04, 2007, New Delhi.

YADAV, S.K. 2009. *Pre-service Teacher Education Programme in India* (Report), NCERT, New Delhi.

J. Krishnamurti's Thoughts Concerning Education

Ashwani Kumar Gaur*

Abstract

J. Krishnamurti's influence on the educational ethos of alternative Indian education is immense. Although he was not an educator in the narrow sense of the term, he worked incessantly in the field of education. He is appropriately described as a 'revolutionary teacher who worked tirelessly to awaken people'. He felt that if people could be awakened to their conditioning of nationality, religion and desires, which inevitably leads to conflicts, they might bring a total change in their lives. His concern for 'good society' found expression in the establishment of schools in India and abroad. Krishnamurti's approach to education was highly original and unconventional for them education should aim at the inner transformation and liberation of the human being. The function of education is to help a person from childhood not to imitate anybody, but to be true to his/her own self all the time. Freedom is the basic motto of Education. Krishnamurti emphasised the relationship between Education and society and said that it's only after evolving a sensible policy of 'right' education that we can look forward to the formation of better society. In today's context his views on education are of paramount significance.

The impact of the philosopher J. Krishnamurti on the educational ethos of alternative Indian education has been of an unquantifiable quality, although this is often not visible in the formal components of secondary school education. Krishnamurti was not an educator in the narrow or formal sense of the term, as he had no formal qualifications to either propagate or promote educational goals or establish educational institutions. Krishnamurti has been described as a 'revolutionary teacher who worked tirelessly to awaken people - to awaken their intelligence, to awaken their sense of responsibility, to awaken a flame of discontent', and this commitment to awakening the

---

* *Associate Professor*, Faculty of Education, Dayalbagh Educational Institute (Deemed University), Agra

consciousness of people was undoubtedly based on a 'strong moral passion' (Herzberger & Herzberger, 1998).

About Krishnamurti

J. Krishnamurti was born on 11 May 1895 in Madanapalle in the state of Andhra Pradesh, southern India, close to the Rishi Valley Education Centre, an institution he established in 1928. His father was an official in the Revenue Department of the colonial administration and Krishnamurti was one of five children. After his retirement from public service, Krishnamurit's father offered his services to the Theosophical Society in Chennai (then called Madras) in exchange for accommodation for his sons and himself. They eventually moved to Adyar, Chennai, in 1909 (Lutyens, 1975, p. 8). In the early years of his youth, Krishnaurti and his brother, Nityananda, were adopted by Dr. Annie Besant, the President of the Theosophical Society, who saw certain spiritual qualities in him that set him apart from others. This further resulted in Mrs. Besant and other theosophists proclaiming Krishnamurti as the vehicle for the World Teacher who was coming, in their words, to bring salvation to mankind.

The 'good society'

In his pursuit of the 'good society', Krishnamurti emphasised the individual's relationship to society as well as his or her responsibility for establishing the 'good society: 'You are the repository of all humanity. You are the world, and the world is you. And, if there is a radical transformation in the very structure of an individual's psyche,

it will affect the whole consciousness of man'.

This kind of society is clearly a society in which caste, class, linguistic and regional divisions would cease to exist. Krishnamurti's emphasis on 'goodness' as the foundation of this new society underlines his plea for a society devoid of any kinds of contradictions or dichotomies.

Krishnamurti seeks to establish schools, as communities of people working together, as a step towards bringing about the 'enlightenment' of human beings.

Right Education

Education forms a central core of Krishnamurti's world view. In fact, Krishnamurti spent his entire life talking about education as being the agent not only of inner renewal but also of social change. Education is therefore the foundation on which the good society will build itself. Krishnamurti always asserted the individual's responsibility to the social order: 'You are the world'. One individual's action therefore affects another, since 'to be is to be related' (Krishnamurti, 1970, p.22), and in this sense there is no individual consciousness but only a collective human consciousness, which implies that the world is not separate from the individual. Krishnamurti points to the harmonious development of the inner and outer world of an individual: 'what one is inwardly will eventually bring about a good society or the gradual deterioration of human relationship'.

Education is not only learning about academic subjects but to educate oneself. There is no need to education. It

is not that you read a book, pass an examination and finish with education. The whole of life, from the moment you are born to the moment you die, is a process of learning.

Krishnamurti's schools did not exist as organisations for the indoctrination of children, but rather as places 'where students and teachers can flower, and where a future generation can be prepared because schools are meant for that. The notion of 'flowering' here implies an unfolding of the consciousness of individuals in relationship to one another in educational praxis. The psychological development of individuals is therefore as important as acquiring academic knowledge and skills. The intention of the Krishnamurti Foundation India schools is that they 'are not only to be excellent academically but are to be concerned with the cultivation of the total human being.

The role of 'right education' is to make the individual 'highly sensitive to everything not just to mathematics and geography because the highest form of sensitivity is the highest form of intelligence'. For Krishnamurti, therefore, the right kind of education does not simply produce engineers, doctors or scientists, but a 'human being who is alive, fresh, eager. If one is a human being, one is not a specialist, but a total entity'. An 'educated mind' is one that thinks that is active, alive; it is a mind that looks, watches, listens and feels.'

Krishnamurti Schools

Education was always one of Krishnamurti's chief concerns. He felt that if only the young and the old could be awakened to their conditioning of nationality, religion, prejudices, fears, and desires, which inevitably leads to conflict, they might bring to their lives a totally different quality. His concern found expression in the establishment of schools in India and abroad.

When Krishnamurti's spoke to school children, his language was lucid and simple. He explored with them their relationship to nature and to one another, and to psychological problems like fear, authority, competition, love and freedom. To him the schools were a milieu in which the larger existential issues could be explored in an atmosphere of freedom and responsibility.

The more apparent features of this spirit are shared by all schools-large campuses of great natural beauty; a friendly, caring relationship between teachers and students, simple, wholesome vegetarian diet; austere but comfortable living quarters; spacious and inviting classrooms; well-equipped libraries and laboratories; and a small teacher-student ratio with highly qualified and motivated teachers. The official Krishnamurti Schools are:

USA-Oak Grove School
UK-Brockwood Park School
India-Rishi Valley Education Centre
India-Rajghat Education Center Rajghat Fort
India-The School "Damodar Gardens"
India-Bal Anand, Mumbai
India-The Valley School Bangalore Education Center
India-Sahyadri School

Surely, a school is a place where one learns about the totality, the wholeness of life. Academic excellence is absolutely

necessary, but a school includes much more than that. It is a place where both the teacher and the taught explore not only the outer world, the world of knowledge, but also their own thinking, their own behaviour.

It is only in such freedom that true learning can take place. In this school it is the responsibility of the teacher to sustain with the student a careful exploration into the implications of conditioning and thus end it. A school is a place where one learns the importance of knowledge and its limitations. It is a place where one learns to observe the world not from any particular point of view or conclusion; one learns to look at the whole of man's endeavor, his search for beauty, his search for truth and for a way of living without conflict. So far education has not been concerned with this, but in this school our intent is to understand actuality and its action without any preconceived ideals, theories of beliefs which bring about a contradictory attitude towards existence. The school is concerned with freedom and order.

The focus at these schools is therefore not only on academic excellence but also on trying to develop and nurture a different quality of mind that will be in harmony with the external world.

Krishnamurti's approach to the nature of education

1. The intentions of education

For Jiddu Krishnamurti, the intentions of education must be the inner transformation and liberation of the human being and, from that, society would be transformed. Education is intended to assist people to become truly religious. These intentions must not be just pleasant sounding ideals to which one pays lip service, and they are not to be arrived at by their opposites. And the religious intentions are not for some eventual goal, but for life in educational centers from memento moment.

2. The physical nature of the places of education:

(a)   Aesthetics: The schools Krishnamurti founded are very beautiful places, and this is not by accident. Beauty is important, not just because it is pleasing, but because sensitivity to beauty is related to being religious and indispensable to the healthy growth of a child.

Perhaps we should include in this discussion on aesthetics what Krishnamurti felt about nature and education. This makes sense in that for Krishnamurti, nature was both beautiful and a demonstration of order. The educational centers Krishnamurti founded are invariably in parks or countryside. This was not just because he felt that nature was pleasing, but because he felt that a relationship with nature had important implications for living sanely and to a relationship with the sacred. He would not, however, condemn as hopeless, inner-city schools that don't have such luxuries, because nature was wholly available in the smallest part; a blade of grass, a house plant, or a gold fish.

If you establish a relationship with it nature then you have relationship with mankind....But if you have no relationship with the living things on this earth you may lose whatever relationship

you have with humanity, with human beings (Krishnamurti 1987).

(b) Special areas that should exist in educational centers: Another physical aspect of the educational centers Jiddu Krishnamurti created and another indication of the religiousness of education, was his insistence that the schools have special places for silence. He often spoke to the students of the importance of a quiet mind or silence so that they could observe their thoughts.

You see meditation means to have a very quiet, still mind, not a chattering mind; to have a really quiet body, quiet mind so that your mind becomes religious. (Krishnamurti 1981a)

The mind of a relgious man is very quiet, sane, rational, logical and one needs such a mind….(Krishnamurti 1962).

The Educator

The right kind of education begins with the educator, who must understand himself and be free from established patterns of thought. If he has not been rightly educated, what can he teach except the same mechanical knowledge on which he himself has been brought up? The problem, therefore, is not the child, but the parent and the teacher, the problem is to educate the educator.

If we the educators do not understand ourselves, if we do not understand our relationship with the child but merely stuff him with information and make him pass examinations. how can we possibly bring about a new kind of education? The pupil is there to be guided and helped; but if the guide, the helper is himself confused and narrow, nationalistic and theory-ridden, then naturally his pupil will be what he is and education becomes a source of further confusion and strife.

To educate the educator - that is, to have him understand himself - is one of the most difficult undertakings, because most of us are already crystallised within a system of thought or a pattern of action; we have already given ourselves over to some ideology, to a religion, or to a particular standard of conduct. That is why we teach the child what to think and not how to think. Krishnamurti expressed his views about education thus:

"…..and I think the teaching profession is the highest profession in the world. Though one acquires very little money out of it I think it is the greatest thing. Really I do. Really think that. It isn't just verbal rhetorical assertion. It's the greatest thing, because in our hands lie the whole future generation."

This is one of the responsibilities of the educator, not merely to teach mathematics or how to run a computer. Far more important is to have communion with other human beings who suffer, struggle, and have great pain and the sorrow of poverty, and with those people who go by in a rich car. If the educator is concerned with this he is helping the student to become sensitive, sensitive to other people's sorrows, other people's struggles, anxieties and worries, and the rows that one has in the family. It should be the responsibility of the teacher to educate the children, the students, to have such communion with the world.

The first thing a teacher must ask himself, when he decides that he wants to teach, is what exactly he means by teaching. Is he going to teach the usual

subjects in the habitual way? Does he want to condition the child to become a cog in the social machine, or help him to be an integrated, creative human being, a threat to false values? And if the educator is to help the student to examine and understand the values and influences that surround him and of which he is a part, must he not be aware of them himself? If one is blind, can one help others to cross to the other shore?

As we have pointed out, we are deeply involved in our daily life as educators and human beings. We are first human beings and then educators: not the other way around. As a human being, with a special profession of education, the teacher's life is not only in the classroom but is involved with the whole outer world as well as inner struggles, ambitions and relationship. He is as conditioned as the student. Though their conditioning may vary, it is still a conditioning. If you accept it as inevitable and abide by it, then you are further conditioning others.

Discipline

Discipline in schools becomes necessary when there is one teacher to a hundred boys and girls, then you jolly well have to be very strict; but such discipline will not produce an intelligent human being. And most of us are interested in mass movements, large schools with a great many boys and girls; we are not interested in creative intelligence, therefore we put up huge schools with enormous attendances.

To clutivate a good mind, a mind that is capable of perceiving the whole of life as one unit unbroken, and so a good mind, it is necessary that in all our schools a certain kind of discipline must exist. We must together understand the hated and perhaps despised words 'discipline' and 'rules'.

Discipline means to learn not to conform. If you want to be a good carpenter you must learn the proper tools to use with different kinds of wood and learn from a master carpenter. If you wish to be a good doctor you must study for many years, learn all the facts of the body and its many ways, cures, and so on. Every profession demands that you learn as much about it as you possibly can. This learning is to accumulate knowledge about it and act as skillfully as you can. Learning is the nature of discipline. Learning why one should be punctual to meals, the proper time for rest and so on, is learning about order in life. In a disorderly world where there is much confusion politically, socially, and even in religion, our schools must be centers of order and the education of intelligence.

Knowledge

Knowledge must inevitably be superficial. It is the cultivation of memory and employing that memory efficiently and so on. Knowledge being always limited, is the function of the teacher to help the student to live all his life only within the limitations of knowledge? We must first realise that knowledge is always limited, as are all experiences.

Is the communication of knowledge the only function of the teacher as it is now passing on information, ideas, theories and expanding these theories, discussing various aspects of them? Is this the only function of a teacher? If this is all a teacher is concerned with, then he is merely a living computer. But

surely a teacher has far greater responsibility than this. He must be concerned with behaviour, with the human complexity of action, with a way of life which is the flowering of goodness. Surely he must be concerned with the future of his students and what is the future for these students? What is the future of man? What is the future of our consciousness which is so confused, disturbed, messy, in conflict? Must we perpetually live in conflict, sorrow and pain? When the teacher is not in communication with the student about all these matters, then he is merely a lively, clever machine perpetuating other machines.

By watching perhaps you learn more than from books. Books are necessary to learn a subject whether it be mathematics, geography, history, physics or chemistry. The books have printed on a page the accumulated knowledge of scientists, of philosophers, of archaeologists and so one.

Most of us in any school, and particularly in these schools, gather knowledge, information, and that is what schools have existed for so far : to gather a great deal of information about the world outside, about the heavens, why the sea is salty, why the trees grow, about human beings, their anatomy, the structure of the brain and so on. And also about the world around you, nature, the social environment, economics and so much else. Such knowledge is absolutely necessary but knowledge is always limited. However much it may evolve, the gathering of knowledge is always limited. Learning is part of acquiring this knowledge of various subjects so that you can have a career,

a job that might please you, or one that circumstances, social demands may have forced you to accept though you may not like very much to do that kind of work.

But as we said, you learn a great deal by watching, watching the things about you, watching the birds, the tree, watching the heavens, the stars, the constellation of orion, the dipper, the evening star. You learn just by watching not only the things around you but also by watching people, how they walk, their gestures, the words they use, how they are dressed. You not only watch that which is outside but also you watch yourself, why you think this or that, your behaviour, the conduct of your daily life, why parents want you to do this or that.

Learning is extraordinarily important because learning is endless. Learning why human beings kill each other for instance. Of course there are explanations in books, all the psychological reasons why human beings behave in their own particular manner, why human beings are violent. All this has been explained in books of various kinds by eminent authors, psychologists and so on. But what you read is not what you are. What you are, how you behave, why you get angry, envious, why you get depressed, if you watch yourself you learn much more than from a book that tells you what you are. But you see it is easier to read a book about yourself than to watch yourself. The brain is accustomed to gather information from all external actions and reactions. Don't you find it much more comforting to be directed, for others to tell you what you should do? Your parents, especially in the East, tell you whom you should marry

May 2011

and arrange the marriage, tell you what your career should be. So the brain accepts the easy way and the easy way is not always the right way. I wonder if you have noticed that nobody loves their work any more, except perhaps a few scientists, artists, archaeologists. But the ordinary, average man seldom loves what he is doing. He is compelled by society, by his parents or by the urge to have more money. So learn by watching very, very carefully the external world, the world outside you, and the inner world; that is, the world of yourself.

The great poets, painters, composers are never satisfied with what they have done. They are always learning. It isn't after you have passed your exams and gone to work that you stop learning. There is a great strength and vitality in learning, especially about yourself. Learn, watch so that there is no spot that is not uncovered, looked at in yourself. This really is to be free from your own particular conditioning. The world is divided through its conditioning: you as an Indian, you as an American, you as a British Russian, Chinese and so on. Out of this conditioning there are wars, the killing of thousands of people, the unhappiness and the brutality.

So both the educator and the educated are learners in the deeper sense of that word. When both are learning there is no educator or one to be educated. There is only learning. Learning frees the brain and thought of prestige, position, status. Learning brings about equality among human beings.

Teacher taught relationship

In India, Krishnamurti appeared a rather forbidding philosopher who advocated no crutches of either a spiritual or an emotional nature and certainly did not allow any psychological or intellectual attachment to himself as a teacher. Moreover, he seemed to be setting a rather difficult task, especially since Hindu tradition in India allows of ritual, belief and unquestioning devotion to a teacher as instruments for psychological, spiritual and social well-being. Krishnamurti's break with tradition and all forms of authority, however, characterises his strength as a philosopher, for he was like a breath of fresh air to those who had been trying to fathom the depths of both consciousness and existence following traditional paths of understanding.

Krishnamurti's legacy to education in contemporary India

From 1929, when Krishnamurti declared that his only concern was to set man totally free, 'freedom' as a state of being was central to his view of life. Evidently, he developed his 'celebrated doctrine of freedom against the background of an abiding love of nature and a firm commitment to individual responsibility in working towards a better society and protecting our natural heritage' (Herzberger). This is reflected in the strong commitment to the habitat and the environment within the KFI schools' curricular frameworks. It has been suggested that this commitment points to "new policy goals for education in India - goals that give priority to the Indian earth rather than to the Indian nation' (Herzberger, 1999 p.10). This in turn would lead to a new curriculum in Indian schools focusing on 'sustaining' the earth".

Learning, therefore, in the KFI schools is not just about ideas or facts in books, but is also about feeling the earth, watching the sunset, listening to the birds, seeing the colours of the leaves change in the different seasons and observing nature in its many colours, forms and shapes, not as a romantic naturalist but in harmony with what is being observed. From this harmony, a sense of responsibility towards the earth ad a commitment towards life on earth will evolve. The KFI school in Chennai has in fact developed a formal curriculum for Environmental Studies as an optional subject at the senior secondary school level, which has been accepted and granted recognition by the Indian Council for Secondary Education (ICSE) for use in all schools affiliated with the ICSE. This has undoubtedly been a major contribution by the KFI schools to the senior secondary school curriculum in India and has wider ramifications in terms of developing the potential for developing a perspective and lifestyle that support ecological balance and emphasize the sustenance of the biosphere.

It is true that very few schools in India have included environmental and social concerns directly in the curriculum. There is a component of 'Socially Useful Productive Work' in secondary schools that enables students to engage in a variety of activities, from gardening to community service, on a fixed and somewhat formal basis. It is here that KFI schools have made another contribution to educational processes in terms of the school's relationship with the community. Taking the cue from Krishnamurti's emphasis on an individual's relatedness to society, the KFI schools undertake projects with the local community and try to establish a wider network of relating to the community that goes beyond mere 'community service' as an aspect of the formal curriculum.

The consequences of Krishnamurti's view of humanity for education

Contrary to the perspective that has shaped much in conventional education, Jiddu Krishnamurti left that all people need to explore themselves and reveal themselves to themselves rather than be shaped into something by others. This is not a new perspective, and again has links to the educational theories of Rousseau, Pestalozzi, Frobel, and Montessori.

The function of education, then, is to help you from childhood not to imitate anybody, but to be yourself all the time. So freedom lies....in understanding what you are from moment to moment. You see, you are not (normally) educated for this; your education encourages you to become something or other...(Krishnamurti 1964) (Chapter 3)

To understand life is to understand ourselves, and that is both the beginning and the end of education. (Krishnamurti 1953c) (Chapter 1).

Modern education is making us into thoughtless entities ; it does very little towards helping upto find our individual vocation. (Krishnamurti 1964) (Chapter 3).

Right education is to help you to find out for yourself what you really, with all you heart, love to do. It does not matter what is is, whether it is to cook, or to be a gardener, but is something in which

you have put your mind, your heart. (Krishnamurti 1974) (Part 1, Chapter 8)

It is in this context that Krishnamurti's engagement with education is of paramount significance, namely his emphasis on the relationship between education and society in terms of the transformational potential of education. This aspect of Krishnamurti's teachings is the cornerstone of his educational thought and can make a significant contribution to evolving a sensible policy that concerns itself with change through 'right' education.

REFERENCES

HERZBERGER, R.1999. *Wildlife conservation: the Rishi Valley experiment.* (Mimeo).

HERZBERGER, H; Herzberger, R., eds. 1998. Reference materials on Krishnamurti's teachings. Vol. 2.

IYER, G. 1999. "Toward an Earth-Centred Curriculum", *Journal of the Krishnamurti schools.* (Chennai), no. 3,p. 76-83.

KRISHNAMURTI, JIDDU.1912. *Education As Service.* Adyar, Madras: Theosophical Publishing Society.

KRISHNAMURTI, JIDDU .1953b. *6th Public Talk*, 5th July, at Ojai, CA.

KRISHNAMURTI, JIDDU .1953c. *Education and the Significance of Life*, London: Victor Gollancz Ltd.

KRISHNAMURTI, JIDDU .1974. *On Education, Pondicherry*, India: All India Press.

KRISHNAMURTI, JIDDU.1975. *Dialogue on Education*, at Ojai.

KRISHNAMURTI, JIDDU.1981a. *2nd talk to students*, 19th November, at Rajghat.

KRISHNAMURTI, JIDDU.1981b. *Letters To The Schools: Volume One.* Den Haag. Holland: Mirananda.

KRISHNAMURTI, JIDDU.1985. *Letters To The Schools: Volume Two.* Den Hagg, Holland: Mirananda.

KRISHNAMURTI, JIDDU.1978. *Beginnings of Learning*, London: Penguin/Arkana.

BOOK REVIEWS

Schooling in India: Hindus, Muslims, and the Forging of Citizens

Author: Veronique Benei   **Rs:** 695

Publisher: Permanent Black   **pp:** xx-346

New Delhi   **Year:** 2009

Schooling is a process of socialisation in a formally civilised form of society. If education instigates to 'think' then schooling defines 'what to think'. In fact every civilised society, it is schooling that defines the boundaries of the socially accepted behaviours and socially unaccepted behaviours for its citizens. But what is considered to be acceptable behaviour is always questionable, particularly in a multi-religious society, where each religious group has its own definitions of good and bad behaviours from its own point of view, which is differed from others. Similarly, what should be characteristics of a good citizen in a pluralistic society? How formal schooling contributes to make a good citizen by inculcating the spirit of nationalism in the formative minds of the children and the youth belong to multi-religious groups to achieve the idea of unitary and unified identity as an Indian? To address these questions in adequate manner, the present volume of this research work has been an attempt on the part of the researcher to perceive India as a one nation against its pluralistic characteristics of the state.

The present work is ethnographic study of primary schools in western India (Maharashtra) by Benei has not only been an attempted to examine the making of good citizens in the formal setting of learning situations but the book addresses the moot question of what goes in making of a nation in a true sense and spirit. In other words, it is about schooling in the service of nation, how schooling functions to create citizens and how nationalism is inculcated in youth.

Highlighting the elements of banal nationalism, i.e. national flag, national song and national anthem, the author has initiated the issue of Indian nationalism in the very first chapter of the book. By giving ample opportunity and reverence to the spirit of nationalism, each aspects of banal nationalism have been vividly discussed by the author in the following chapter. In the school context the daily chanting of the nation into existence explores the formation of

patriotism and nationalism. As it has been pointed and observed by the author that the production of banal nationalism supported by the morning liturgy in the school unconsciously places the children at the realm of identification process of making them as good citizen.

The present study by the author herself embedded in the form of book gives insight into the educational processes occurring right from the beginning of socialisation and as early as kindergarten and primary school which are crucial to the production of local, regional and national attachments. To make her observations more substantive and affirmed the author has quoted the views of eminent educationists of the contemporary India, on socialisation of children which is intricately embedded in a multiplicity of culturally defined norms and rules from an early age. Emphasising school in-terms of Weberian terminology as an public entity as recognised and legitimised by state and acts as a model of state functionary where the stakeholders-parents, teachers and educational officials play a crucial role in shaping state injunctions, relating them to ongoing political events, both within and outside the country. All these negotiated productions may crucially contribute to the social and political constriction of persons and citizens. In this case, young innocent children-future citizens are taught by the pedagogy that mirrors the imagining of identity-ethnic, religious and linguistic. Schooling hereby plays a particular role in the process of making of citizens.

In the next chapter of the book, a vivid elaboration has been done at the school level on the different symbolic aspects of identity like language, cultural bodies and emotions of the individuals in the process of making and producing good future citizens. The study is based on the ethnographic accounts of Marathi-medium and few Urdu-medium primary schools in Maharashtra vicinity; the author clearly describes the importance of Marathi language as a dominant cultural tool to express the feelings and sentiments of nationalism among the primary school children. Drawing on the field experiences by the author herself has observed that how the daily iterations of devotion to the Indian nation are explicitly expressed by the state dominant language i.e. in the Marathi language. The mediation of language, the discipline procedures extant in everyday life at school gives wide experiences in the construction of the nation. The chapter also draws upon the intimacy of the home and family that makes Maratha schools potentially powerful resources that are activated in times of heightened conflict. Schools in Maharashtra have been seen through the lens of producers of regional and national allegiance that have become naturalised, legitimised and authentic.

Tracing life in a Marathi-medium and an Urdu-medium school in Kolhapur dealt in Chapters 4 and 5 separately are truly commendable for the academicians. In both cases, it is clearly shown by the author that the inner life of the class-room transactions where pedagogic authority (social actors) is exercised to construct knowledge and culture. It gives the reader an opportunity to grapple with the issue of recognising the school's role as a social institution.

Moreover, the author has explored the inner contradictions of identity formation in respect to spatial and social contexts. The first dimension holds the tension between the national and the regional i.e. in case of a Marathi- medium school, Benei guides us to notice the specificity of Maharashtra's regional identity, formulated as the Maratha self, crystallises in two major curricular domains, namely, history and Marathi language which is supported by the analysis of textbooks especially, the Grade IV book which introduces Shivaji, The Great Maratha Warrior.

The other dimension holds the tension inherent in Hindu-Muslim relations in the portrayal of the Urdu-medium school; Benei shows how the language chosen and used to carry out teaching creates a world of its own. Also, schooling serves to shape up the otherness of Muslims. How a community and a sense of belonging thereto are produced or at least reinforced through schooling. It is in congruence with Stuart Hall's Volume Questions of Cultural Identity wherein "identities are about questions of using the resources of history, language and culture in the process of becoming rather than being…" somehow the existing processes leading to "sharper differentiation of identifications" which endow upon Muslims an "irredeemable otherness".

In the concluding chapter of the book, aspiring for producing better future citizen the author has explicitly acknowledged the importance of military schools for the protection of national identity. These military schools are symbolic of Maharashtrian heritage that ought to serve and benefit the Indian nation at large. The Prantinagar School provides"evidence" under which sexual polarities appear to be transcended in favour of a balanced growth- at least that of boys- and extreme regional aspirations are transcended in favour of a national agenda. This chapter however distract from the otherwise sustained consistency of the analysis of what Benei calls "visceral citizens".

Benei's work undoubtedly enriches the readers about the future of education in Maharashtra. It portrays a clear picture of the sense children make of a narrowly defined curriculum-both functional and ideological. She aims to reveal the collective cognition, with reference to a nation, its freedom and the history and the goals of that freedom. She focuses on the fact that national states have until recently penetrated down to the minutest details of the everyday in order to instill a sense of nationalism in the citizens.

Nevertheless, the present volume can offer insights in so wide a range of fields and disciplines should suffice to indicate the scale of the author's attempt and success. Further, the author does not talk about those citizens who do not recognise the dominant cultural definition of a nation. Certainly Maharashtra cannot be the representative of whole of India as Benei has attempted to prove in the present work. More or less the ethnographic narratives depicted by the author in the book suffered from the narrow perspective as she is taking Hindu population dominated schools in making out the sense of India. To avoid the narrowness and provide the broader perspective the research could have extended to other cities and could have

taken other Hindu ideologies bearing schools as well as Muslim Madrasas, only then the title of the book will be justified in true sense. Overall, the major contribution of the book however to provide the impetus to the Maharashtra State Centre for Educational Research and Training is that there is a need to produce textbooks within a secularist and ecumenical framework, avoiding any explicit discussion of religion in the school texts.

SHILPI BHASKAR
Research Scholar
National University of Educational
Planning and Administration (NUEPA)
New Delhi

PANKAJ DAS
Research Scholar, CIE,
Department of Education
University of Delhi

Teaching Learning Process
AUTHOR: VERONIQUE BENEI
PUBLISHER: ALPHA PUBLICATION, NEW DELHI
RS: 690   **YEAR:** 2007

The term teaching learning process is always happens to be a will coming topic for any teachers or others who are involved in the area of education directly or indirectly.

There are hundreds of books/ documents and materials (audio and Visual) explaining teaching leaning process, its technique, methodology, its different aspects in different ways.

We can see the change in concept of teaching leaning process in every documentation. The concept of teaching learning process is so vast and multidimensional that every time it is dealt it reflects innovation in terms of perception of the author.

Teaching leaning process takes place in continuum. Its not a one time activity or move to one direction only. Teaching leaning takes place all the time, with all activities, movements and experiences we are involve directly or indirectly.

It's a two way process, takes place between the teacher and the taught, covers physical, social, emotional and cultural environment of the learner in an around.

Every teacher adopts a variety of strategies/process and explains the content in his/her way unique in nature suitable to pupil and place (Classroom). Same teaching-learning process/ strategies cannot be replicated by

another even if the learning conditions are similar. Every teacher has their own way of teaching.

Presently child centered education is in the central of leaning. We always talk up child friendly curriculum/curricular materials/teaching methods and classroom. Such conditions are conducive and learning take place to the optimum.

Here the question arises if learning takes places even if there is conducive and child friendly environment in the classroom?

It is the teaching methodology teacher behaviour, attitude, activities, concepts explanation, communication skills, unwise nature which contribute largely for the learning of the child. I believe even in the absent of text book, TLMs and suitable infrastructural facilities a child can learn, it solely depend on the teachers-how she/he teaches, handles the children in the classroom her ways of presentation, explaining the content keeping the learners level in view. If a teacher is determined to make her children learn-they will learn.

The above analysis indicates that teaching activities is a multidimensional process. In view of this publication covers different aspect and component of teaching-learning process which directly or indirectly effect learning of the child.

The present publication has twelve chapters, which covers right from the different theories of learning to development of learner, role of teachers and programmed learning to name a few.

Theories of learning will facilitate teachers/readers to know about the psychological aspect of learning enabling

them to adopt teaching leaning process accordingly

Introduction to Learning, the first chapter explains different definitions and characteristics of learning to facilitate its readers/teachers to understand the concept of learning in depth. It explains the areas which re interrelated with the leaning of the child and that which a teacher is supposed to know to make learning meaningful and achievable. It will enable a teacher to organise teaching-learning activities suitably. "Any change in behaviour which is result of experience and which causes people to face later situations differently may be called learning,"-(Jones and Simpson,p-1), defines the word learning to its fullest. This chapter brings a comprehension knowledge about learning, will be useful reading for teachers and teacher educators.

Growth and Development of Learner the second chapter deals with various aspects of child development-cognitive, social, emotional and moral, keeping in view the character stick of childs development. A teacher can make child learn adopting suitable teaching learning process and modifying as and when required to suit any child. Every child is different from other. Physical, mental social (behaviour) and emotional development of a child effect child learning is a recognised fact. Following the principle of individual difference, 'a good teacher provide........................... page 39

This document also highlights the socialisation of a child during pre-adolescent period which again will be a useful reading to teachers. During the whole process of teaching learning the

role of teacher is of paramount important. Third chapter in this publication is about the role of a teacher which has significant impact on a child. Before a child steps in school, mother is his first teacher at home. After a child enters to school, it is the teacher who becomes his/her role model which moulds the personality of a child to a great extent, with regard to behaviour, attitude, and values. This chapter explains the qualities (characteristics) of an ideal teacher,- "The ideal teacher, in effect, is one who becomes a model of behaviour for the yong."(P-65)

Findings of Research (Ryans) study about what personalities are most appropriate for teachers found that effective teachers tend to be extremely generous in appraising the efforts of others, possess strong literary and artistic interests, participate in social groups and prefer non-directive class-room proceedings and employ student centered methods (p-65).

The Forth chapter-Learning Techniques, is informative in nature. Under different sub-headings the editors have analysed various techniques of learning, such as, factors of learning, improving learning conditions, fundamental bases of motivation, forms of rewards and and their effectiveness, to name a few. These components are equally important for teachers who are involved in Teaching-Learning Process. It has explained how rewards in ant form can motivate pupil leaning.

The fifth chapter, 'Intelligent Test', explains how administering intelligent tests to children in the class can help a teacher in assessing child's achievement level, enabling her/him to adopt teaching method suitable to the child. The content of this chapter elaborates the standards to be observed by the teacher while selection of appropriate techniques for effecting learning. It also has highlighted the importance of 'Questioning' as a technique adopted during teaching-learning process .It will facilitate teachers to adopt this technique to develop interest in the work at hand and create a learning situation which can act as a stimuly, desire and curiosity to know more. To stimulate interest questioning should be predominantly thought provoking in nature, it is an important factor and is the central component of this chapter. Techniques of utliliastion of visual devises explained in this chapter are significant and important for teachers involved in teaching-learning process. The authors, in this chapter have explained about the prerequisites that a teacher should follow in selection of visual devices and its usages. In fact usage of any visual devises should be pre-planned ....(p-153)

During teaching- learning process a teacher needs to be concerned with regard to teaching of exceptional/gifted children to meet their particular educational needs. Chapter sixth of this publication is related with various aspects of teaching of exceptional children at any level of education.

Chapter IX—Transfer of Learning, is one of the important components in the whole frame work of teaching-learning process. It is expected that a teacher is well informed about the teaching methods which would result to optimum learning among the children. In this context Chapter IX holds much significance for teachers. Teaching of any

subjects (skill, knowledge, attitudes acquired) the effect should be positive. When the effect is positive, there is positive transfer of learning and vice-versa.

To develop motivation among children is one of the most important aspects which every teacher should nurture in the children. It influence learning to a great extent. Various aspects such as, Importance of motivation in education, types of Motivation and techniques of motivating students have been explained in detail in chapter tenth. It will facilitate teachers to organise suitable inputs viz.conducive atmosphere during Teaching-Learning process in classroom situation.

Chapter eleven of this publication has explained, 'how schools, its overall atmosphere, and the teacher can contribute in development of personality and character building among children. It has rightly said, "The school that promotes emotional security and understanding of values contributes a great deal to character development."-(p-296)

The content of the last chapter which is about Programmed Learning is comparatively a new concept of pedagogy in school education system with regard to teaching-learning process. This programme is based on teaching-learning process ,as such it is a time consuming but there is ample scope for the child to learn at his own pace. The concept will enrich teachers who are involved in teaching in secondary classes to organise educational programmes suitable for learning a particular concept particularly in Mathematics & Science.

PUSHPA MANDAL
Reader
DEE, NCERT
New Delhi

Problems of Scheduled Caste and Scheduled Tribe Children*

Executive Summary

The basic objective of this paper is to critically examine the contemporary reality of schooling of children belonging to scheduled caste and scheduled tribe communities, with a view of suggesting policy and programmatic applications, especially in the domain of curriculum, to improve their educational situation. Sharp, historical differences between and within these communities have been eroded by socio- economic change and have brought the SC and ST on greater common ground. However, considerable material and cultural diversity still exits, therefore, the need to maintain contextual sensitivity while analysing their educational situation.

In the post independence context of massive state supported expansion and democratisation of schooling and institution of positive discrimination policies to facilitate access, education has successfully served, albeit to varying extents and with marked regional variations, as a key instrument of change and emancipation for the SC and ST. It has brought them self respect and socio-economic advance, raised political consciousness and empowered their identity struggles. However, educational disparities between the SC and ST and the rest of the population, in terms of quantity, quality, teaching – learning process and learning outcome, have been far from eliminated. The inequalities reflect the fact that theirs has scarcely been an equal integration into dominant society. Rather, in a society characterised by growing polarisation, their inclusion has been governed by relation and processes of exploitation, discrimination, displacement and oppression. Global economic forces have brought about greater ruin of large sections of SC and ST who experienced marginalisation by development processes. Poverty, unemployment and ill health are disproportionately located among them. Tribal have suffered large scale land

---

alienation and dispossession from natural resources and are reduced to economic and cultural subservience to non- tribal communities. Vast numbers of the Scheduled Castes have been unable to escape stigmatised occupations and social existence.

Such socio- economic conditions could not but create a disjuncture between survival needs and educational needs, leading to limited educational progress of the SC and ST. Our survey of quantitative expansion reveals the dismal contemporary scenario of inequality in access, retention and attainment at the school level. While an unprecedented rise in enrolment is evidence of strong demand for education among the SC and ST, accessing basic school is as yet a massive problem. Though school participation rates have increased, attendance rates are unsatisfactory at the primary level and worse still at the middle. Drop out, failure and low scholastic achievement afflict SC and ST to a far greater degree than non SC and ST school children. The cumulative impact is low rates of school completion. Gender disparities are conspicuous on all educational indicators revealing the under – education of girls. SC and ST communities have become increasingly patriarchal as a result of processes of cultural absorption. Gender and class along with tribe and caste constitute fundamental categories of exclusion. Furthermore significant inter–state, inter–regional and rural–urban disparities exist especially in politically neglected states and regions. Intra caste and intra–tribe variations are also sharp and indicate that the relatively more

marginalised of SC and ST groups, experience gross educational deprivation. Scheduled tribes appear to lag behind the Scheduled Castes in most states barring largely the North- Eastern ones, due to specific socio- historical factors.

Our exploration into the field reality of schooling of SC and ST children entailed a critical overview of basic educational provision as well as issues related to structure, content and process of the schooling. We find that historical inequality in diffusion has been mitigated to a great extent, but unequal provision continues to be the fundamental educational deterrent. Quality of mass education has declined to an abysmal level. Current policy changes have led to a rapid decline in teaching – learning conditions and have exacerbated the already grim situation in neglected regions and remote tribal areas. The cut in public spending on education has proved most damaging. It has adversely affected state provisioning of schools and teachers and encouraged in its place the most substandard and commercially oriented private effort or spectacular but unsustainable innovations. Ironically, as India Stakes claim, as frontrunner in the world knowledge economy, her underprivileged children suffer the consequences of grossly inferior basic education. Several dimensions of educational inequality are conspicuous by their presence in schools for the SC and ST and signify the decline and dilution in educational quality. Diffusion is as yet inadequate in many parts, leading to situations whereby 'social' accessibility persists as a problem for the SC child and the absence of even

a poorly functional school remains a disadvantage imposed on a remotely located tribal child. Inferior learning opportunity is actualised in the poor quality of infrastructure, an inadequate and demotivated teaching staff, inadequacy of teaching transaction and in the provision of teaching learning material. The model of ' minimum levels of learning' further compromises quality in no uncertain measure as education gets diluted to literacy. School level policies of positive discrimination caught in the quagmire of bureaucratic apathy, politicisation, political patronage and corruption, offer limited coverage and an appallingly poor quality of service. State institutions meant to play supportive roles reflect patronising and derogatory assumptions about facilities befitting the SC and ST.

Curriculum has served as mediator of ideological dominance and hegemony, evident in the selection and structuring of knowledge, pedagogic practice, and in weak and distorted representation of subaltern groups, culture and ideologies. Curricular change supposedly aimed at indigenisation in post colonial educational policy, resulted in Brahmanisation as a key defining feature. The historical significance of structural oppressions of caste, gender, tribe and religion were made invisible by a school curriculum in which the dominant discourse was of cultural majoritarian nationhood. The Brahmanical construction of knowledge was evident in the eulogisation of specific forms of mental capacities, and dominance of Brahmanical language, literature, history as well as Brahmanical religion – culture practices,

symbols and modes of life in curricular content. By corollary there was a devaluation of manual labor, of "lesser' dialects, cultures, traditions, and of knowledge rooted in productive processes of lower castes and their socio- cultural habitat. Their knowledge, values, and skills found no place at all in the school curriculum. Nor did their stories, music, songs folklore or cultural and religious practices. Curriculum also retained its colonial character privileging knowledge of western hard sciences, technology and styles of life as also of the English language. The ideology of modernisation was adopted in truncated, superficial ways and the presence of liberal and democratic socialist values was largely notional. Phule and Ambedkar's thought critically adapted western liberal ideology towards the emancipation of India's downtrodden, radically transgressing narrow technocratic modernising elements. However the vibrant expressions of Phule- Ambedkarism and its vision for a new moral order for Indian society hardly found a space in a curriculum dominated by the thought of high caste nationalists neither did reflect upon varied other challenges posed by dalit epistemology, knowledge and protest. The Scheduled Castes and their issues remained peripheral and their representation, if at all in the curriculum, has been weak and distorted.

Curriculum did not acknowledge the cultural rights and history of the Scheduled Tribes either. The Scheduled tribes have a dual and contradictory relationship with education. On the one hand education as a central avenue of development and nationalism plays a part in the destruction of tribal language,

culture and identify and generates a negative self image. School regimen and curriculum fail to take account of tribal cultures, particular, of their culturally anomalous free and egalitarian socialisation and learning practices. Nor do they take cognizance of the special cognitive abilities of tribal children. On the other hand however, forces of cultural adaptation reinforce tendencies of alienation within the Scheduled Tribes themselves, who now look to schools to provide linguistic and social competencies that will facilitate their equal integration in dominant society.

Equal integration however has been difficult for both SC and ST. Schools themselves have served as sites of caste, tribe and gender power relations. An appalling body of evidence suggests that teacher preconceptions, bias and behaviour, subtle or overt, conscious or unconscious, operate to discriminate against SC and ST children. Teachers belong to alien cultures, they speak alien languages which becomes an obstacle to symbolic adaptation, motivation and learning. Most demeaning are the stated or unstated assumptions held by teachers of SC and ST children's' 'deficient' cultures, habits, behaviour and styles of speech, of their inherent intellectual incapacitates and of their 'uneducatbility'. They lead teachers to adopt pedagogic practice and deliver teaching transaction that compound the situation of weak and discriminatory inclusion.

Indisputably the situation needs an urgent and serious response. The focus group has made several recommendations towards improving the larger institutional context without which meaningful curricular reform will be difficult to achieve. We strongly reiterate the need for equitable provision of quality education, a more focused, need based and responsive implementation of positive discrimination programmes, improved teacher recruitment policy and teacher working conditions towards enhancement of teacher quality, status, competence and self esteem. We suggest a critical resolution of cultural dilemmas for developing culturally sensitive and transformative curricular policies and programmes. It is essential that curricular and pedagogic approaches are rooted in critical theory and multiculturalism to nurture expansive cultural identities oriented towards the larger public good. Curricular goals of teacher education need to be recast with an emphasis on theoretical and experiential knowledge to gain an understanding of as well as sensitivity to SC and tribal communities. School curriculum and pedagogy must provide opportunities for every child's learning and her free, creative and multidimensional development. The culture and experience that the SC or ST child brings to the school must be integral to an egalitarian teaching learning process in fulfillment of the goal of a meaningful education for all children.

विद्या ऽ मृतमश्नुते
NORTH EAST REGIONAL INSTITUTE OF EDUCATION
(National Council of Educational Research and Training)
Umiam, Shillong-793103, Meghalaya

एन सी ई आर टी
NCERT

NATIONAL SEMINAR
ON
'NEW PERSPECTIVES OF HEALTH AND PHYSICAL EDUCATION IN SCHOOL'

CALL FOR PAPERS FOR PARTICIPATION

A national seminar on **'New Perspectives of Health and Physical Education in School'** is being organised by North East Regional Institute of Education, National Council of Educational Research and Training, Umiam-793103, Meghalaya for two days from 19-20 February 2014. Interested participants are requested to send their abstracts (500 words) and full papers (5000 words) to the Coordinator. The abstracts and full papers, that are to be sent in both hard and soft copies, should be related to the subthemes and will be published as books of seminar proceedings. On request from the presenting author, local free hospitality with TA will be provided. No registration fee is required. Last dates for —

• **Abstract submission: 15 November 2013**
• **Full paper submission: 24 December 2013**
• **Participation confirmation: 31 December 2013.**

For further details, please see websites
www.nerie.nic.in and www.ncert.nic.in