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About the Journal

The Primary Teacher is a quarterly journal brought out by the National Council of Educational Research and Training (NCERT), New Delhi. The journal carries articles and researches on educational policies and practices, and values material that is useful for practitioners in contemporary times. The journal also provides a forum to teachers to share their experiences and concerns about the schooling processes, curriculum textbooks, teaching-learning and assessment practices. The papers for publication are selected on the basis of comments from two referees. The views expressed by individual authors are their own and do not necessarily reflect the policies of the NCERT or the views of the editor.

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TO THE CONTRIBUTORS

The Primary Teacher invites you to write articles, field notes and reports that impact elementary education. The focus may be on issues and concerns that you are sensitive to, which you feel should be shared with other teachers working at the grassroots level.

- Each article should be about 1500 to 3000 words.
- Each article should have a short abstract in about 150 words.
- Use simple and non-technical language, keeping the clientele in mind, who are primary teachers.
- The articles should have a friendly and communicative tone.
- The articles must be sent in two copies, along with the soft copy (CD/e-mail).
- The photographs and illustrations should be sent in JPEG format, having a resolution of at least 300 dpi.

The papers may be sent to:

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MY PAGE...

This column would contain your letters and feedback, where you can put forward your responses, suggestions and expectations from the articles, papers and columns presented in *The Primary Teacher*. You may have issues, concerns and doubts related to teaching-learning processes, classroom practices, syllabus, textbooks, evaluation patterns, research pursuits, etc. These could also reflect the concerns of many others working in this area. Please feel free to raise these issues in this column. You could also ask specific questions that would have baffled you.

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CHILDREN'S BILL OF RIGHTS

A child is every person under the age of 18 years. Parents have the primary responsibility for the upbringing and development of the child. The State shall respect and ensure the rights of the child.

Dignity and Expression

- I have the right to know about my Rights. *(Article 42)*
- I have rights being a child and no matter who I am where I live, what my parents do, what language I speak, what religion I follow, whether I am a boy or a girl, what culture I belong to, whether I am disabled, whether I am rich or poor. I should not be treated unfairly on any basis. Everyone has the responsibility to know this. *(Article 2)*
- I have the Right to express my views freely which should be taken seriously, and everyone has the Responsibility to listen to others. *(Article 12, 13)*
- I have the Right to make mistakes, and everyone has the Responsibility to accept we can learn from our mistakes. *(Article 28)*
- I have the Right to be included whatever my abilities, and everyone has the Responsibility to respect others for their differences. *(Article 23)*

Development

- I have the Right to a good education, and everyone has the Responsibility to encourage all children to go to school. *(Article 23, 28, 29)*
- I have the Right to good health care, and everyone has the Responsibility to help others get basic health care and safe water. *(Article 24)*
- I have the Right to be well fed, and everyone has the Responsibility to prevent people from starving. *(Article 24)*
- I have the Right to a clean environment, and everyone has the Responsibility not to pollute it. *(Article 29)*
- I have the Right to play and rest. *(Article 31)*

Care and Protection

- I have the Right to be loved and protected from harm and abuse, and everyone has the Responsibility to love and care for others. *(Article 19)*
- I have the Right to a family and a safe and comfortable home, and everyone has the Responsibility to make sure all children have a family and home. *(Article 9, 27)*
- I have the Right to be proud of my heritage and beliefs, and everyone has the Responsibility to respect the culture and belief of others. *(Article 29, 30)*
- I have the Right to live without violence (verbal, physical, emotional), and everyone has the Responsibility not to be violent to others. *(Article 28, 37)*
- I have the Right to be protected from economic exploitation and sexual exploitation, and everyone has the Responsibility to ensure that no child is forced to work and is given a free and secure environment. *(Article 32, 34)*
- I have the Right to protection from any kind of exploitation and everyone has the Responsibility to ensure that I am not being subjected to be taken advantage in any manner. *(Article 36)*

IN ALL ACTION CONCERNING CHILDREN, THE BEST INTERESTS
OF THE CHILD SHALL BE A PRIMARY CONSIDERATION

All these rights and responsibilities are enshrined in the United Nations Convention on the Rights of the Child, 1989. It contains all the rights which children have all over the world. The Government of India signed this document in 1992.

Source: National Commission for Protection of Child Rights (NCPCR), Government of India

EDITORIAL

Pedagogic practices in recent times focus on the creation of a stress-free atmosphere, conducive to learning and facilitating children to find meaning in everyday experiences. The National Curriculum Framework (NCF)–2005 states that education should enable a child to draw connections between ideas, people and things, and relate them to the world around.

This issue of *The Primary Teacher* focuses on contemporary issues in elementary education. The first paper by Vijitha Rajan examines some important aspects of educational exclusion of children of migrant workers in India. For the children of migrant labourers, particularly, seasonal and short-term migrants in distress, schooling is still a distant dream. A new theoretical and policy discourse that embodies children's everyday experiences of migration and education in larger politics of exclusion is presented in this paper.

In the second paper titled 'The Nurturance of a Scientist', Vandana Kerur shares some memorable incidents from the life of Thomas Edison and highlights how his mother played an important role in his life. Edison was rejected from formal school for being too inquisitive, and was hence, schooled at home by his mother, who not only taught him but also made him confident.

The third article, 'The Constructivist Approach and the *Panchatantra*', by Chitra Singh is an attempt to elaborate on the constructivist approach of teaching, which emphasises creativity and going beyond textbook education. The author links constructivist education to the *Panchatantra*, which through stories is perhaps the first effort in the ancient Indian education system that went beyond formal teaching and learning. The author illustrates the concept through activities based on *Panchatantra* stories.

In the next paper titled '*Raindrops* — English Language Learning Kit', Varada M. Nikalje provides a detailed description of the English language learning kit developed by the National Council of Educational Research and Training (NCERT). The author explains its importance in the cognitive development of learners of Classes I–V and how it would also help develop language learning skills in them. This Kit is NCERT's recent initiative to enhance English language learning skills in children studying in government schools across the country.

The fifth paper, 'Experiencing the Sublime — The Contributions of Akka Mahadevi' by Gouri Srivastava throws light on the Bhakti Movement, and the works of Akka Mahadevi, a prominent Kannada woman poet in the twelfth century. This paper elaborates on the life of Akka Mahadevi and her contribution to the Kannada literature. Her works deal with issues that are relevant even today.

The sixth paper by Gobind Singh Gure elaborates on a study that examines primary school students' minimum level of learning competencies in cognitive areas in relation with gender. The study indicates that teachers, educational authorities and administration need to use constructive approach in teaching at the primary level in order to encourage the learners and help them perform better.

Ajit Horo through the paper titled 'Writing for the Ears!' discusses the aspects that one need to keep in mind while writing for the audio medium and how it can help enhance a person's communication skills.

The journal also carries its regular features — My Page, Book Review and Did You Know.

In the review of the book, *Nuggets — Reflections on Language Education* by Varada M. Nikalje, reviewer Sandhya Rani Sahoo says the book is an interesting reading material for those engaged in language education. It is a collection of articles that focuses on four central themes — nature of meaning, language usage, language cognition and relationship between language and reality.

'Did You Know' talks about the game 'snakes and ladders', and presents interesting insights into its origin and how it can be used as a medium of learning.

'My Page' deals with a course — Diploma in Elementary Education. It describes how this programme is useful for new, as well as, experienced teachers.

— Academic Editors

Educational Exclusion of Children of Distress Migrants in India

Vijitha Rajan*

Abstract

For the children of migrant labourers, particularly, seasonal and short-term migrants in distress, schooling is still a distant dream. The paper tries to highlight some important dimensions of educational exclusion of migrant children in India. The educational exclusion of migrant children must go beyond the realm of educational policy and processes, and hence, find place in the larger context of education, development and migration discourses in India. A new theoretical and policy discourse that embodies children's everyday experiences of migration and education in the larger politics of exclusion is envisioned through this paper.

INTRODUCTION

For the children of migrant labourers, particularly, seasonal and short-term migrants in distress, education and schooling are still a distant dream. These are the children, who remain invisible in the eyes of society and State as data, regarding their existence and exclusion, are not even recorded. Educational exclusion of children of distress migrant labourers is, therefore, a relatively under researched area.

Most researches on distress driven internal migration in India centre on its patterns, causes and consequences; relationship with poverty and livelihood; labour dynamics and politics; social and cultural dimensions; implications for development and rural change; and nature of labour informality and urbanisation. Major focus of these migration narratives is on the migrating adult population. The nature and extent of the presence and engagement of children in the

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migration process has still not been explored, and has hence, remained a passing reference in most of the migration studies conducted as regards to India. Some studies highlight the conditions in which migrant children live, such as inadequate resources and safety conditions, fear of being forced to work as labourers, trafficking and abuse [Betancourt, Shaahinfar, Kellner, Dhavan and Williams, 2013; Burra, 2005; Deb, 2005; Ghosh, 2014; International Labor Organisation (ILO), 2013; Roy Chowdhury, 2014; Venkateswarlu, 2007; Whitehead and Hashim, 2005; and Whitehead, 2011]. Some studies explore educational access and exclusion of such children (Aide et Action, 2012; Boyden, 2013; Coffey, 2013; Roy, Singh and Roy, 2015; Schapiro, 2009; Smita, 2008). However, not much attention has been paid to critically exploring the relationship between migration and children's experiences of educational exclusion.

Giani (2006) argues in the context of Bangladesh that the impact of migration on children's lives is less explored in literature because of strong adult-child hierarchy, wherein, children are often viewed as passive beings just obeying their adults. This lack of exploration is evident in the Indian context as well. Inadequate attention to children of migrant labourers tends to de-politicise the hardships that they face. Therefore, it is important to focus on the experiences and perspectives of

migrant children in their own right (Dobson, 2009).

MIGRATION, CHILDREN AND EDUCATION

Children, constituting a significant number of the migrant population, are central to the analysis of social consequences of migration. The fact that the number of children involved in seasonal migration in India is estimated at 6 to 9 million [Deshingkar and Akter, 2009; National Commission for Protection of Child Rights (NCPDR), 2012; Smita, 2008 and Van de Glind, 2010] is a clear indication of the complexity of the problem. Children belonging to migrant families form a critical mass of those who are educationally underprivileged (Srivastava and Sasikumar, 2003; UNESCO and UNICEF, 2012).

A survey conducted by the Ministry of Human Resource Development, Government of India, in 2013 cites migration of families as one of the most important reasons behind dropout rates at the elementary level in 21 States of the country. The survey reveals that around 12 per cent boys and girls dropped out in these 21 States because of families migrating from one place to another in search of livelihood.

There are studies that indicate that accompanying migrant children are more vulnerable to be engaged as labourers, and hence, face educational exclusion compared with children left behind back home (Roy, et al., 2015). It is important to understand their exclusion in light

of larger dynamics of education and development frameworks in contemporary India.

The fact that short-term and seasonal migrants are likely to belong to the lowest socio-economic strata (Keshri and Bhagat, 2012) is an example of macro level footprint that tells us about the nature and politics of migration by the most marginalised sections of the society. However, there are no comprehensive data that can reveal the scale and nature of this problem. Also, there is no systematic state intervention to include these children in mainstream education or provide them with meaningful learning opportunities on a large scale.

Educational access and systemic exclusion

Various studies indicate that migrant children's access to education is severely hampered both in source and destination sites. A number of reasons are cited for the educational exclusion of migrant children, such as lack of schools near parents' work sites, absence of residential hostels near source sites, involvement of children as labourers, burden of taking care of younger siblings, inability of parents to monitor children's education, sub-standard education provided by government schools, lack of guidance by parents and teachers, poor infrastructure and informal learning centres, and so on. Though migrant parents aspire to give quality education to children, they do not have

the necessary support structure. These deprivations are more prominent for seasonal migrants. The schooling of their children is not coordinated in source and destination sites (Smita, 2008). Absence of adequate and appropriate educational facilities at destination sites, systematic transfer processes and provision of bridging facilities make it even more difficult for seasonal migrant children to get back to the formal education system (Ramachandran, 2006; Van de Glind, 2010). This is likely to have a cumulative impact on the learning and development of seasonal migrant children.

The existing education system is inadequate to respond to the needs of migrant children as it is fundamentally designed for settled populations based on ideas of spatially defined education administration units, fixed community, where the school is located, and school processes defined by fixed curriculum and language.

Dyer (2010, 2012) in her research with pastoralist migrant children calls this place-based schooling system 'hegemonic'. She argues that the education system de-recognises 'pastoralism' as a legitimate livelihood option through systemic exclusion, such as fixed institutional structure and its unquestioned features (like fixed timings, annual calendar and requirement to be in school throughout the year). Dyer further argues that the provision of educational access in India is historically based on ideas of geographical proximity

and sedentary habitation, which are unjust for mobile groups of population. Migration itself is perceived as an exception against the norm of sedentary patterns of habitation and livelihood (McDowell and De Haan, 1997).

Once this aspect of fundamental exclusion of migrant population and children in development and education frameworks is understood, one can understand the reasons behind the failure of initiatives designed to facilitate access to education to migrant children.

The *Sarva Shiksha Abhiyan* (SSA), 2007, provides various approaches to provide quality education to the children of migrant labourers. These include setting up of seasonal hostels to retain the children in source villages when the parents migrate for livelihood, establishing work-site schools at places where migrant adults are engaged in work, arranging for volunteers who can accompany the migrating families and take care of their children's educational needs, developing strategies for tracking such children through migration cards or other records in order to ensure continuity in education before, during and after migration. However, there are enormous challenges to such efforts. These include willingness on the part of employers, addressing the problem of congested learning spaces, designing curriculum for children of different classes or age-appropriate curriculum, provision of adequate and appropriate teaching-learning

methods and aids, availability of volunteers and teachers speaking multiple languages, presence of under aged siblings at the education centre or school, and demand for domestic and work-site labour from children.

The children of distress migrants, especially, interstate migrants are uprooted from their culture and planted in an entirely new culture. With knowledge and learning being embedded in the language and culture of a particular region, the problem becomes even more complex. The inherent challenge of physical mobility (Smita, 2008) cannot be addressed by educational initiatives rooted in normative ideals of fixity, stability and place-based schooling.

Migrant children's educational experiences in India may be viewed in the historical context of systemic exclusion of disadvantaged sections of society. Post-colonial scholars argue that the colonial legacy legitimised differential educational access for children from marginalised communities (Balagopalan, 2014). This was continued by the post-independent Indian state and is a major impediment to the provision of equitable education to all children in the country as structural issues that kept many out of school were not adequately addressed by non-formal education programmes (Kumar, 2006). Though it is true that the effect of migration on the schooling of migrant children is highly context sensitive (Schapiro, 2009), it seems that there is lack of

commitment towards the education of such children, both in source and destination sites. Smita (2008) points out that the names of migrant children are on school rolls. Besides, no record is maintained for a large number of children, who drop out of school mid-session and migrate for long periods. In the destination sites, the education of migrant children is often left to the mercy of the rich, charity by private organisations or benevolence of civil society organisations. Hence, it is important to find out who is accountable for the education of migrant children.

Macro context of migration and development in India

The exclusionary development paradigm, in which migrant lives thrive, is critical to problematising the educational exclusion of their children. The economic dualism between village and city in post-independent India facilitated transition of labour from field to factory and massive migration of people from rural to urban areas (Breman, 1996). Breman argues that the dualism of formal and informal sector, and conceptualisation of informal sector as waiting room for unskilled rural worker to migrate soon to the formal sector has remained a fallacy in the Indian context. Economic reforms based on growth oriented neoliberal development model and capitalist exploitation of informal labour form the background of migration by people belonging to the marginalised sections of the society.

Srivastava (2011) points out that the pattern of growth in India has widened the gap between agriculture and industry, and spatial inequalities between rural and urban population. Like Breman, he, too, argues that labour in India is getting increasingly informalised due to increased growth in certain sectors, and subsequent demand for flexible and cheap labour. Migrants form the core of this labour in both rural and urban areas.

Exclusionary urbanisation (Kundu and Saraswati, 2012) and neoliberal restructuring of the city (Jha and Kumar, 2016) shape migrant experiences. The way migrants are placed in this larger development paradigm defines their relationship with the State. In the study of *Adivasi* seasonal labour migration in western India, Mosse, et al. (2005) explain how migrants depend on agents, brokers and contractors as labour departments, unions and law fail to protect their rights. This results in increased exploitation of migrant workers. The living conditions of the migrants influence the childhood of their children — their development and education.

Education does not occupy a significant place in the policies drafted for migrants. The Interstate Migrant Workmen Act, 1979, does not include details of family members while registering workers during recruitment (National Commission for Protection of Child Rights, 2012), leave alone the provisions for the education of migrant children.

The Contract Labour (Regulation and Abolition) Act, 1970; Bonded Labour System (Abolition) Act, 1976 and Minimum Wages Act, 1948, too, do not have anything substantial for the education of migrant children. To top it all, the Minimum Wages Act, 1948, says that different minimum rates of wages may be fixed for adults, adolescents, children and apprentices, reinforcing the idea of child labour. Even as this point, apart from some others, was proposed to be deleted through an amendment(s), the idea was to remove the disparity in wages and not the fundamental problem of legitimising child labour.

The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996, though talks of compulsory provision of crèches and responsibility of the welfare board to provide financial assistance for the education of children, education as a fundamental right of these children does not find a mention.

The Unorganised Workers' Social Security Act, 2008, considers education schemes for children as a social security and welfare scheme but there is no indication as regards to its implementation. The Right to Education (RTE) Act, 2009, also needs to be amended so as to specify educational provisions for migrant children. Though Sections 4, 9 and 15 of the Act speak about the educational inclusion of migrant children, the modalities of working these out, and appropriateness and practicality of

such provisions in the lives of migrant children remain ambiguous.

Migrant children

The hard-to-reach category of migrant children is not intellectually comprehensible due to homogenisation or extremely broad classification, which do not recognise the varied contexts of their lives (Dyer, 2013 and 2015). Such policy discourses understand children's experiences in the light of normative ideals of childhood and education, and propose uniform, standard and techno-rational solutions. Such understanding constructions of children from marginalised communities are problematic for various reasons. Firstly, it does not consider the geographical, political, cultural, institutional and socio-economic locales of the children's lives and their educational experiences. Secondly, it undermines the children's agency and resilience.

How would the current law governing child labour (that permits children below the age of 14 years to work in non-hazardous family enterprises) understand the experiences that migrant children face on a daily basis? The current policy discourse is critiqued for envisaging compulsory education as the foremost and uncontested solution to the problem of child labour, viewing formal schooling as a space that saves child labourers (Balagopalan, 2008 and 2014). What is, therefore, required is to re-examine the policies and reforms and save the lives of children coming

from marginalised communities. The need of the hour is to construct research and policy discourses that enable understanding children's lives in their real spaces and imagining educational initiatives that speak of alternative visions of childhood, education and social justice.

CONCLUSION

The educational exclusion of migrant children is stark and its implications complex. The problem needs to be addressed on priority so that all migrant children enjoy the right to quality education.

This paper highlights three important dimensions that shape

educational exclusion of distress migrant children in India. They are — systemic educational exclusion, macro context of migration and development, and homogeneous construction of the migrant child. People with least education and skills are more prone to distress migration. Besides, the children of distress migrant workers face the highest form of educational exclusion at destination sites. Therefore, it is important to change the perception of treating children as luggage, source of anxiety and agents, who experience the world in their own right (Dobson, 2009) and place their everyday lives and experiences in the larger politics of exclusion.

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The Nurturance of a Scientist

Vandana Kerur*

Abstract

This paper elaborates the emotional journey of a child with reference to the experiences of famous scientist Thomas Alva Edison during his growing-up years. The role of women — in Edison’s case, his mother in early childhood years — have been, particularly, emphasised. This paper highlights the way family plays a crucial role in the holistic development of a child, moving beyond the limitations of social acceptance. The confidence is transferred to the child before one gets acquainted with the nuances of the outside world. Three examples have been illustrated in the paper to delve into details for understanding the fragile nature of the child.

INTRODUCTION

‘Home is a child’s first school and mother the first teacher’, goes an old saying. Every person is born with unique talents, which may be nurtured or lost in the circumstances one grows in. The under representation of women in science can be traced to the cultural biases affecting their education. As a result, there is far more less entry of women as compared to men in

the field of scientific research. The barriers faced by women, who went on to become scientists, have been well documented. What is less visible is the role played by the wives, sisters and mothers of male scientists, who achieved name and fame. Most of the time, it is the mother who recognises a child’s talent(s) and plays a major role by encouraging it. This paper is an attempt to highlight a mother’s faith in her child’s abilities.

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NANCY MATTHEWS ELLIOTT — MOTHER OF THOMAS EDISON

The story of how Thomas Edison was rejected from school and homeschooled by his mother, Nancy Matthews Elliott, is well known. This story has evolved with a number of attached incidents, mostly fictional. But it is a fact that his mother, who taught him at home, was a major influence in his life. When Edison was in the early grades of school, his mother Nancy was qualified with a degree in education. But she was not practising as a teacher at that time as she was busy taking care of the family.

As a child, Edison constantly asked every adult to explain the working of just about everything he came across. This persistent questioning made his teacher lose patience and one day, Edison came home with a note that his teacher had written to his mother. He told her, “My teacher gave this paper to me and told me to give it to you.” His mother’s eyes welled up as she read the letter. It was a letter from the school, dismissing her son. Controlling her tears of anxiety and dismay, she said to the little boy that she would read out the letter to him. Not to discourage her son and demoralise him, she pretended to read the following, “Your son is a genius. This school is too small for him and doesn’t have enough good teachers for training him. Please teach him by yourself.”

Nancy taught him the three Rs (reading, writing and arithmetic), the

Bible and introduced him to a library, where she encouraged him to read the classics. Edison, a curious child, read every book kept on the shelves in the library, which included books on science, apart from classics. His parents scraped enough money to hire a tutor once they realised his interest in science. His work was more on the applications of scientific principles, resulting in the invention of phonograph, electric bulb or electric utility system, motion pictures and nickel-iron storage batteries.

Edison always credited his mother for her undying love and patience, and giving him a firm footing in the world as a precursor to his success. He said, “My mother was the making of me. She was so true and so sure of me. I felt that I had someone to live for, someone I must not disappoint. The memory of my mother will always be a blessing to me.”

Many years later, long after Edison’s mother had passed away and he had become one of the greatest inventors of the century, he was glancing through old family articles. He chanced upon a folded paper in the drawer of a desk and opened it. It was the note that his teacher had sent him home with, now yellowed with time. He read out the note, which stated, “Your son is addled (mentally ill). We won’t let him come to school anymore.”

Edison wept for hours, acknowledging his mother’s courage, steadfastness and faith in him. His diary contains an emotional note for

that day, which reads, “Thomas Alva Edison was an addled child raised by a hero mother and went on to become the genius of the century.” He followed her maxims of ‘never being afraid to fail’ and ‘to keep improving and not stop learning’ all his life. He often said, “Failure is the road to success”. It is not the idea that fails. It only means that one’s way of approaching it has failed and should, therefore, be eliminated, and another way should be tried out. Edison once said, “I have not failed. I have just found 10,000 ways that won’t work”.

Writing in 1885, Sarah Knowles Bolton marvels at Edison’s remarkable work ethic: “Five feet ten inches high, with boyish but earnest face, light gray eyes, his dark hair slightly gray falling over his forehead, his hat tipped to the back of his head, as he goes ardently to work, which has averaged eighteen hours a day for ten years, he is indeed a pleasant man to see.”

“You perceive he is not the man to be daunted by obstacles. When one of his inventions, printing machine, failed, he took five men into the loft of his factory, declaring that he would never come down till it worked satisfactorily. For two days and nights and 12 hours — 60 hours in all — he continuously worked without sleep, until he had conquered the difficulty, and then, he slept for 30 hours. He often worked all night, thinking the best when rest of the world slept,” she adds.

Edison changed the world with concretisation of his invention

process. He believed in the principles of sharing ideas and teamwork, which act as catalysts in the process of education. This led to the establishment of the first industrial research laboratory. Edison is credited with 1,093 inventions, making him one of the most productive inventors in human history. Later, it was known as the commercial R&D lab. This concept was became so popular in his lifetime that almost every major company created its own R&D lab. The invention of R&D labs stands out as the incredible process that keeps the Industrial Revolution of the 1880s vibrant and what we refer to as technology driven growth — the very foundation of what we mean when we say ‘progress’. Edison founded 14 companies — the largest being General Electric Company, which adopted the tagline — ‘Progress is our most important product’ in the 1950s.

It is a fact that reaching the top position in scientific research is demanding, and requires commitment and perseverance. To do so, an inventor or scientist needs the support and understanding of family members.

It is important to understand that familial support is necessary at all stages of life, especially, the primary stage. Qualities of emotional appreciation, especially, the correct assessment of a child’s physical and behavioural characteristics and needs by teachers are important. An incorrect analysis will lead to unfair decision making on the

part of teachers. Patience, on the part of teachers, is required for quality emotional appreciation in children, especially, children with special needs.

The anecdote as mentioned about Edison is reflective of two themes, which are as follows.

- Mother's confidence in her child's abilities, which paved the way for Thomas to become a renowned scientist
- A teacher's incorrect assessment of the student, which sealed Thomas's path to acquire educational experience at school

This narrative is a learning opportunity for primary teachers, especially, as children start forming opinions and perceptions about themselves and the world around during the primary years of life. It is important for a teacher to guide children at the primary stage as it is a crucial period in their life. One must not think just about the product but also the process. The next time you switch on an electric bulb, take a moment to remember not just Edison but also his mother, who helped him bring light to our lives.

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3

The Constructivist Approach and the *Panchatantra*

Chitra Singh*

Abstract

One learns by doing. This age-old concept has appeared under many labels over the years and has remained the most powerful educational tool till date. Teachers are challenged to find classroom-based approaches that will prove beneficial for students of all age groups and help them understand what needs to be learned. This challenge is not new and common to the profession. Constructivism is an approach that encompasses all phases of the learning process by supporting the inclusion of a variety of discussions, participation and group work as part of reading and learning. In this paper, the role of this approach in teaching and education has been discussed. The ways a teacher can innovate one's teaching skills by going beyond today's textbook centric education, and making students participate and discuss the topics covered in textbooks in a creative manner has also been elaborated. The paper discusses, with examples how Panchatantra, the first-ever effort in the education system that went beyond textbooks and turned students into active learners, can be used as a tool to this end. Some examples from the tales of the Panchatantra have also been highlighted in the paper.

INTRODUCTION

Life has become more complex due to knowledge and information explosion. So, there is more to learn with technology advancing at an

unprecedented pace, making it difficult to grasp what needs to be learned.

In 1916, John Dewey, a well-known educationalist, said teachers need to assign tasks to students that involve

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acquiring and testing ideas and information in active pursuits, typifying important social situations. This view has been applied in classrooms for generations and has been reaffirmed in recent years. Lev Vygotsky developed the concept of the 'zone of proximal development' (i.e., the difference between what a learner can do with and without help), which suggests that the learner benefits from interaction with others in the process of learning. The 'zone of proximal development' involves teachers, as well as, students. Learning is a social phenomenon, and one's interactions with others provide stimulus, motivation and information exchange that is vital to one's overall development. This would appear to be most significant with reference to language use, an important human characteristic.

In recent years, the term 'constructivism' has been used to label the phenomenon of learning as an active process, wherein, each person processes the information received and formulates new ideas. The term may, thus, be explained as: "Constructivist teaching and learning recognises that knowledge is created in the mind of each learner, and that effective teaching approaches to delve into the learner's mind through active learning; learner-generated inquiry; concrete and authentic experiences; discussions and reflections; collaborative investigations; and structuring learning around primary concepts" (Graves, 1998).

In classroom education, constructivism strongly supports the inclusion of a variety of discussion and group work as part of reading and learning (Wilensky, 2004). Hence, the learning process is dependent on communication not only with teachers but also with others. Students share ideas and information with each other as they engage in learning activities. This provides an environment, which helps enrich the thought process of the participants.

The constructivist approach employs five phases to learning and teaching, known as the 5Es (engage, explore, explain, elaborate and evaluate).

The 'engage' phase aims at promoting interest and motivation among the students. In this phase, the emphasis is on activities to arouse the curiosity of the students, puzzle them and raise questions for further investigation.

The 'explore' phase provides the students with practical experiences. In this phase, they continue raising questions, listen to the views of others and investigate different phenomena. The students are encouraged to express and share their views.

In the 'explain' phase, the students explain their findings to others and their ideas are subjected to greater scrutiny. In this phase, the teacher introduces the students to relevant scientific explanations. By the end of this phase, the students should have developed greater understanding of the phenomena under investigation.

In the 'elaborate' phase, the emphasis is on the students applying their understandings developed during the previous phases to a range of familiar and unfamiliar situations. In this phase, they can see how fruitful their new ideas are. This phase is important as it allows the students to see how well their ideas work in a range of contexts.

'Evaluate' is the final phase. Here, the students' understanding is assessed formally and they are encouraged to reflect on and question the ideas that they have developed. Each lesson taught involves aspects of each phase discussed above, and each phase should be evident in the planning and implementation of the unit as a whole.

PANCHATANTRA — THE FIRST TEXT USING CONSTRUCTIVIST APPROACH

The *Panchatantra* stories have regaled children and adults alike for more than two-and-a-half millennia. Each story ends with a moral. There is a story about a king, who worried that his three sons did not possess the wisdom to live in a world of wile and guile, and therefore, asks a learned man named Vishnu Sharma to teach them the ways of the world. Vishnu Sharma decides to pass on wisdom to them in the form of stories. In these stories, animals speak like human beings. *Panchatantra* is a collection of stories about the five ways that help human beings succeed in life. *Pancha* means 'five' and *Tantra* means 'ways', 'strategies' or 'principles'. Addressed

to the king's children, the stories are, primarily, about statecraft and have become popular across the world. The five principles are as follows.

- *Mitra-Bheda*: loss of friends
- *Mitra-samprapti*: gaining friends
- *Kakolukiyam*: of crows and owls (war and peace)
- *Labdhaprasam*: loss of gains
- *Aparikitakaraka*: ill-considered action or rash deeds

It is under these five principles that the precepts of basic education, such as building of knowledge, skills, attitudes and values are woven in such a way that they leave no scope for the students to get bored or tired while they imbibe the essence of these strategies. The art of storytelling is used to teach these principles to the students. Moreover, the author of *Hitopadesh*, another text derived from the *Panchatantra*, puts it — “*Niti* imparted with the help of stories remains engraved in the minds of children forever.”

It can be said that the 5Es of the constructivist approach are in line with the five *Tantras* of the *Panchatantra* as the process adopted for teaching is the same and students learn a lot without problems that they, usually, face in the traditional or conventional way of teaching-learning.

Applying constructivist approach using the *Panchatantra*

The teaching ideas discussed in the following paragraphs demonstrate how constructivist approach may be

used with the *Panchatantra* in helping students advance their knowledge and skills in a variety of academic areas. These activities replicate the processes by which learning occurs and provide opportunities for social interaction as a vehicle for fostering learning and active practice in various skill areas.

Reading activity: determining logical sequence

In this activity, the students are given a story. The parts of the story are printed or written on separate slips. The students are asked to form small groups (up to four members in each group) and distribute the slips among themselves. The group members are asked to read aloud the segments of the story that they have received. When all story segments have been read out, the group members have to place the segments in order, forming the entire story. They need to paste the segments on a sheet of paper in order. At last, the group members put their names on a paper and submit it to the teacher for review and grade.

This is a jigsaw type of activity, which provides a vehicle for reading aloud, listening and comprehending the main ideas and supporting details. This activity is helpful in providing the students with an opportunity to examine the use of transition words that help in tracking the sequence of events in reading material.

A note on assessment

In this activity, the emphasis is on the sequence of the story, which

needs to be logical. Attention to transition words is a consideration as the sequence is clearly indicated by transition markers.

Sample story in eight parts

The Foolish Tortoise

(Transition words are given in bold.)

Part 1: The tortoise did not like people shouting and said, “Why should these fools shout like that?” But even as it uttered these words, it lost hold of the stick, and down it went when it hit the ground and died.

Part 2: “How can we help you?” asked the geese. “We can get to any place on Earth by flying. But you can’t travel like that.”

“It is true that I cannot fly like you,” said the tortoise, adding, “but you can help me and take me along with you.”

To this, the geese said, “How can we do that?”

Part 3: **Once**, there was a tortoise in a large tank. It had two geese as friends. The geese used to come to the tank and the three of them spent most of their time together. They lived happily for a number of years.

Part 4: **Then**, there was a drought in the country, and for a long time, there was no rain. Rivers and tanks were drying up. There was famine in the land. People and animals were dying. Birds were flying away to places of safety. The two geese sensed the danger from the drought. They, too, decided to migrate to some other place.

They met the tortoise to take leave of him.

“Why do you bid me farewell?” said the tortoise. “Am I not your friend? Don’t you want me also to live? Why do you leave me here to die?”

Part 5: **So**, all of them agreed to the plan. The geese brought a strong stick and held it with their beaks at both ends. The tortoise held on to the middle of the stick with its teeth and the geese flew, carrying the tortoise. They flew higher and higher.

Part 6: “That is easy,” said the tortoise. “Bring me a stick. I can hold the middle of the stick with my teeth. Both of you can take hold of the ends of the stick with your beaks and fly high, taking me along. Fly slowly to a place, where we will be safe from the drought.”

Part 7: The geese thought over the matter and said, “We hope we can manage this but there is one danger in the plan. If, by chance, you attempt to speak a word while we are up in the air, you will lose hold, fall down and be crushed to death.”

“But I will do no such foolish thing,” said the tortoise. “I will not utter a word as long as we are in the air,” it added.

Part 8: They flew over fields and hills, and then, over a city. The people of the city noticed the strange sight in the sky. They had never seen anything like that before. They clapped and shouted, “Look! How wonderful! Two birds carrying a tortoise, and see how they are doing it.”

Analysis

This is how the *Panchatantra* tales could be used in a classroom to enhance the linguistic, cognitive, social and emotional skills of young learners.

Images or pictures can also be used and the students can arrange them in sequence.

Besides, the following elements of storytelling and story listening can assist a child develop literacy skills.

- Listening
- Re-telling
- Experiencing sequencing — a progression of events
- Vocabulary
- Grammar
- Visualising
- Thinking about motives (developing the understanding of characters’ personalities and actions)
- Thinking about values and morality

From re-telling to thinking about values — all can be taught to the students using one of the many tales from the *Panchatantra*. The title of the story is ‘Ringdoves Escape’. The value of cooperation is vividly demonstrated in this story. Reading it and doing activities based on it is an effective way of promoting cooperation in classrooms and among students. This story will get the students thinking, talking and discussing about the importance of cooperation.

The story starts with a hunter setting a giant net beneath a spreading

banyan tree and scattering grains to catch birds. White Wing, a ringdove king, and its flock notice the grains from sky. They swoop downward and are soon trapped in the net. As the hunter gleefully approaches the birds with his club, White Wing tells the ringdoves, “We must not panic, my friends. There is a way to escape from this terrible fate but we must all agree to work together. The net is too large and too heavy for any one of us to lift. But if we all fly upward at the same time, I am sure we can lift the net and fly with it.” The other ringdoves quickly agreed. When White Wing signaled, all birds flew upward at the same time. They lifted the net and it looked to the hunter, who watched in amazement, like a flying net rising on its own and vanishing into the sky.

Various activities can be done around this story. Some of them are as follows.

Drawing

This story lends itself vividly to illustration. Ask the students to draw it in panels and strips.

Discussion

Ask the students — “Name something you can do with a group that you can’t do by yourself.” List their choices on a board or chart paper.

Role-play or performance

Some students can be asked to perform the story assuming different roles, while others can observe them and give feedback.

CONCLUSION

There are several ways to enable children to learn. The key to this, however, lies in recognising that students must be actively involved in the learning process. Constructivism reminds us of this. When the teacher is able to provide activities that are colourful, concrete and enjoyable, then the students are likely to get engrossed with greater enthusiasm and attention. The results are predictable. Vishnu Sharma, who authored the *Panchatantra*, knew it well and devised a way of teaching that we now know as ‘constructivism’.

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4

Raindrops — English Language Learning Kit

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Abstract

Various research studies suggest that children, particularly, in the early years, can learn best through environment and daily life activities in a stress-free atmosphere. When learning is seen as a fun activity through games and stories, children enjoy as they learn. The National Council of Educational Research and Training (NCERT), an apex body that works for school education in India, specifically, developing textbooks, supplementary reading material and e-content, has brought out a number of educational kits over the years. 'Raindrops' is one such kit developed for English language learning at the primary stage. The Kit aims to improve English listening and speaking skills of children in their early years in a stress-free environment and encourage construction of meaning (no rote memorisation). It also tries to sensitise sighted children to the different way of learning being done by their visually challenged peers. The Kit, therefore, helps young learners overcome their phobia for English as a difficult language. The author highlights the need to make English language a comprehensive and engaging experience for children and that educators try to move away from the conventional textbook culture, in which only the receptive capacity of children's learning is observed and evaluated.

INTRODUCTION

Academic discussion on any aspect of education focuses on the best pedagogical practices. No pedagogical method

can be defined or identified as most suitable for the best possible result. That said, various research findings indicate that children, particularly, in their early years, can learn maximum

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through their environment and daily life activities in a stress-free atmosphere. When learning is seen as fun through activities, games and stories, children not only learn but also enjoy while learning.

The National Curriculum Framework (NCF)–2005, developed by the NCERT, recommends that children’s life at school must be linked to their life outside. This principle marks a departure from the legacy of conventional pedagogic practices, which overlook the efforts put in by children to learn by observing their natural and social environment and finding meaning in their everyday experiences. The NCF–2005 states, “Effective understanding and use of language(s) enable a child to make connections between ideas, people and things, and relate (to) the world around.”

The basic function of a language is to communicate. As the world has become a global village, the demand for communication is increasing by the day. Gone are the days when an educated person, whose discipline was language, was expected to know and quote stanzas, quotations and references. The focus today is on communication and not knowledge of classics. In the twenty-first century, communication skills in English are being viewed as the basic necessity for economic growth and social mobility in India. Even parents, living in rural India, understand the importance of English in their children’s lives as regards to employment opportunities.

However, English as a language of teaching and learning is a matter of concern for policy makers and educationists across the country. A number of English medium schools has mushroomed in metropolitan cities and also in rural areas but the quality of English taught in many of these is a matter of concern.

In India, English is a compulsory subject in schools at the primary stage. It is introduced in Class I in 28 out of 36 States and Union Territories (NCERT, 2004). The main aim of teaching English in schools should be to inculcate the basic skills of listening, speaking, reading and writing in students.

Children are natural learners. Right from birth, they are actively engaged in exploring and responding to the world around and making meaning. They have an innate ability to emulate pronunciation and come to terms with the rules of a language. Children’s linguistic ability, interests, knack for conceptual thinking, physical skill, and so on, develop over the span of schooling — right from pre–school to higher secondary. Usually, a child acquires the rules of one’s mother tongue at an early age without any formal instruction.

Our concern is to make the learning of English language a comprehensive and meaningful experience for children and move away from the conventional textbook culture, in which only the receptive capacity of children’s learning is developed. In our classrooms, the

only voice frequently heard is that of the teacher and this needs to change. The development of language skills depends, to a large extent, on stress-free atmosphere conducive to joyful learning. Along with textbooks, other inputs also contribute to such an atmosphere.

RAINDROPS — ENGLISH LANGUAGE LEARNING KIT

The NCERT has been working to break the conventional notion of language learning only from textbooks since 2005. It advocates that various other inputs must be used to enrich the linguistic environment of children. The aim is to promote English learning in children through songs, poems, riddles and activities.

In order to encourage children to learn English in an effective manner, the NCERT has developed an English language learning kit titled *Raindrops*. It was introduced as one of the inputs for language learning. It is a useful teaching-learning aid for developing reading, writing, listening and speaking skills in children, as well as, developing their vocabulary and grammar.

Kit items — List and relevance

The Kit consists of different types of material and also a User's Manual.

The Kit aims to develop English language learning skills in children in a stress-free environment, encourage the construction of meaning in them and sensitise sighted children

with the problems faced by the visually challenged. It also aims to make English language learning an engaging and enriching experience.

Reading material

The Kit includes two short stories to develop the imagination of the children, link the stories with their mother tongue or home language, and appreciate writing and illustrations. Designed to be read by an emergent reader, it also includes laminated charts, containing poems, narratives, double letter words, missing words, etc., along with illustrations to stimulate the imagination, expression and creativity of the students.

Anagrams

This comes in a small blackboard, with English notebook pattern embossed on it and few examples of anagrams. The remaining space is left blank for children to form new words. This helps develop in children the ability to play with words and form new words.

Masks

Masks of various animals, such as lion, elephant and cat are part of this Kit. These can be used to introduce animal characters in a story or narrative, and later for role-play.

Card pairs

A set of cards, having pictures of many objects, is also a part of this Kit. There are 20 pairs of pictures — one card having one picture, the other having a word, as well as, a picture. All cards

are neatly arranged faced down. Each player has to select two cards and turn them up. If they match, the player keeps the pair. If they do not, then the next player gets the chance. This game addresses the learning outcome of associating words with pictures, as well as, sharpening the memory skills of children.

Pronunciation cards

There are 10 'Listen and Repeat' activity cards. These are based on the concept of minimal pairs. The Kit includes laminated cards, containing pair of words for pronunciation practice. It aims to familiarise children with the pronunciation of words, for example tail, bail, fail, sail, wail, etc.

Alphabet cubes

Twenty-six 1×1 inch colourful alphabet cubes in ABS plastic is also a part of the Kit. These familiarise children with the letters of the alphabet and speaking these letters aloud, thereby, encouraging finger-tracing.

Alphabet tiles

There is an entire set of tiles, having capital and small letters of the alphabet, and numbers from 0 to 9. The students can join the tiles and form words.

Initial medial and final sounds

There are three mini white boards, focusing on initial, medial and final sounds. For instance, the first two letters of a word are given, and the children may be encouraged to make as many words as possible. A number

of activities are given for practice, so that the learners develop vocabulary and phonemic awareness, and improve their pronunciation skills. The activities will also help them appreciate the sounds that they hear.

How to draw

For Classes I and II, the focus may be on drawing and speaking the words aloud. For Classes III and IV, the Kit may help children notice the words whenever they occur in textbooks or storybooks, etc. For Class V, it may be used as an essential part of paragraph writing, particularly, to describe a process.

Braille chart and measuring scale

The Kit contains a laminated chart, containing Braille alphabet for visually challenged children and those having weak eyesight. It aims to help such children read and recognise the letters of the English alphabet. A scale is embossed at every inch and centimetre to help the children in measuring or counting. The Kit also aims to sensitise sighted children about the problems faced by the differently abled.

Emoticons

The Kit contains nine emoticons to familiarise the children with various emotions and feelings.

Slate to write and draw

The Kit includes a slate that contains pictures in a continuous pattern. The children have to identify the pictures and continue writing or drawing in the same pattern.

Four riddle cards

Cards, containing riddles, is also present in the Kit. These cards stimulate the imagination and creativity of the children while learning as riddles require them to think out of the box. The children can also be encouraged to relate with the riddles in their mother tongue.

Word circle

The Kit also contains a circle with various letters. This helps the students to form words with the given letters.

The 'User's Manual', facilitates the endeavour through various strategies that focus on different aspects of the teaching-learning process, such as pronunciation, identification, association, imagination and creativity, with a learner-centric approach (NCERT, 2018). The Kit also includes different type of charts, such as alphabet chart, anagrams, sentence connectors, vocabulary, poems, short stories, and so on. It also includes material for language games for children studying in Classes I to V.

Effort has also been made to develop English language skills in differently abled learners. The Kit provides a Braille chart for visually impaired children and those with weak eyesight. It consists of English alphabet and numerals in Braille. The Braille chart can be displayed in the class. All children will naturally look at it with curiosity. The teacher can then explain that just like English, Braille, too, is a language. The teacher can point out at the arrangement

of dots that represent each letter of the alphabet and numerals (0–9). The teacher may further encourage the children to write simple words, such as 'cat' or 'book' in Braille, and may simultaneously mention that few textbooks and storybooks are available in Braille.

RAINDROPS KITS PROCURED

Initially, many States and Union Territories procured the *Raindrops* Kit as sample but later procured it in large numbers. For instance, Kasturba Gandhi Bal Vidyalaya in Andhra Pradesh, initially, expressed willingness to buy only one kit per school but ended up buying three per school. A Delhi school bought 5,000 kits. As of now, Jharkhand and Haryana have procured the maximum number of kits. Dadra and Nagar Haveli, and Daman and Diu have also purchased the Kit.

SAFETY ISSUES

The *Raindrops* Kit is, primarily, for young children so that they can learn while they do various activities or play games. Care was taken to ensure that the items in the Kit are child and user friendly. For instance, the edges of the charts and cards are rounded, and each of them is covered with micron pouch lamination so that no injury is caused to the tender hands of the children. The animal masks are made of soft flexible material. They are not stiff like cardboard and plastic masks, generally, available in market. In the

process of developing the Kit, it was ensured that all items are anti-allergic and non-hazardous. The emoticons have a safety pin at the back, which the children cannot unpin easily. They, too, do not have sharp edges. An elastic band, with rivets on both sides, is attached in such a manner that it fits comfortably. The slates for anagrams will not break even if children drop them on the floor.

CONCLUSION

The *Raindrops* Kit, developed by the Department of Educational Kits, NCERT, reflects a child-centric approach, and will help facilitate easy and interesting ways of learning English. It is intended to improve the overall language performance of children — oral communication, reading and fluency skills, and use of comprehensive strategies by teachers. The activities in the Kit are suggestive in nature. This implies that the teachers are welcome to design their own activities with the material provided in the Kit.

The NCERT developed the Kit after four years of research, which included workshops for the development of content, as well as, concretising ideas and concepts into practical material.

The trial of the Kit was planned in three States — Arunachal Pradesh, Karnataka and Himachal Pradesh. These States were not chosen

randomly. Arunachal Pradesh is a tribal dominated State. It has 15 major and 13 minor tribes. These tribes speak different languages, which are different in terms of vocabulary and syntax. They use either Hindi or English to communicate with each other and with people, who have come here from other parts of India. The Arunachalee acceptance of English is, therefore, based on the need of various tribes to communicate. Karnataka has, by and large, accepted English along with the regional language. English is perceived as a *Lingua Franca*, which leads to better job opportunities. Himachal Pradesh is a State in the Hindi speaking belt but English is yet to find a place in the actual learning set-up, in terms of acceptance. Hindi and local dialects are dominant here. Thus, the three States represent varying acceptance levels of English in the country.

Thus, after piloting, the Kit was launched and mass produced, which got acceptance in a short span. The main objective is to reach out to students at the primary level across India so that each child can learn through fun activities and strengthen one's language skills.

In the near future, NCERT hopes to reach out to the maximum number of students and help them improve their communication skills in English.

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Experiencing the Sublime — The Contributions of Akka Mahadevi

Gouri Srivastava*

Abstract

This paper discusses the significant contributions of women — writers, philosophers, saints and philanthropists. The paper is a biographical account to understand the works and preaching of Akka Mahadevi, a twelfth century woman saint poet of Karnataka who practised Shaivism. Her poetry instills a sense of bhakti, coupled with her feminist instincts, and an unconventional life that she lived.

INTRODUCTION

The Indian subcontinent has records of the contributions of women in different fields across centuries. They showed the vastness of knowledge and exposition in language and literature during the Bhakti Movement. One of the noted women saint poets of India during those times was Akka Mahadevi. Her works are well-known even to this day. This paper presents an account of this great woman saint poet, and the relevance of her life and work.

Akka Mahadevi, a twelfth century woman saint poet of Karnataka, was

a prominent figure of the Veerashaiva Bhakti Movement. A devotee of Shiva, she was introduced to Virashaivism, when she was a young girl. She was born in 1130 A.D. to Sumati and Nirmalshetti (Sharma, 1908) in Udathadi (also, Udutadi), a village near Shimoga in Karnataka. Her parents were also staunch followers of Shaivism. Being born and brought up in such an atmosphere, she developed devotion for Shiva. She refers to Shiva as ‘Chenna Mallikarjuna’, meaning ‘the beautiful lord as white as jasmine’ (Tharu, et al., 1991).

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Mahadevi is said to have contributed immensely towards the enrichment of the Kannada literature. She has composed nearly 400 *vachanas* in Kannada, which are in the form of didactic poetry, educative with moral lessons and values. Her *vachanas* have an inherent simplicity with similes taken from nature and everyday life.

Legend has it that when Mahadevi grew up, she was married to a local king. But the marriage did not last and Mahadevi decided to walk out of it. The king, then, asked her to return all the jewellery and clothing that he had gifted her. From then on, Mahadevi stripped herself and stepped out onto the streets as a saint without clothes. The following couplets by Mahadevi testify the circumstances that occurred in her life.

*Husband inside,
Lover outside.
I can't manage them both.*

*The last thread of clothing can
be stripped away,
but who can peel off emptiness,
that nakedness covering all?
Fools — while I dress in the
Jasmine Lord's morning light,
I cannot be shamed;
What would you have me
hide under, silk and the glitter
of jewels?*

*I am in love with the one, who
knows no death, no evil, no form.
I am in love with the one,
who knows no place, no space,
no beginning, no end.
I am in love with the one,
who knows no fears nor the
snares of this world,
the boundless one, who
knows no bounds.
More and more, I am in love
with my husband known by the
name of Chenna Mallikarjuna.
Take these husbands who die,
decay and feed them to your
kitchen fires.*

Therefore, the relationship with a mortal man as companion or husband was not satisfactory for Mahadevi and she considered mortal man as 'thorn under a smooth leaf'. Once she left her earthly husband, she became free to seek spiritual solace in Shiva.

AKKA MAHADEVI'S VACHANAS

Akka Mahadevi's *vachanas* are the most dependable source of information about her life and thoughts. Some of the famous *vachanas* composed by Akka Mahadevi are as follows.

*I have cast away pride of
riches, caste and learning.
For Thou has blest me
with Thy grace.*

*I am no helpless woman
 I utter no futile threats
 I am nothing daunted
 I shall dare hunger and pain
 I shall steal out of withered
 leaves a wholesome meal
 And on pointed sword
 Shall make my bed
 I am ready for your sake
 To dare the worst
 To die this instant
 The readiness is all
 Oh! My Chenna Mallikarjuna.*

*Can sandalwood cease to
 emit the fragrance,
 when it is cut into pieces?
 Can a piece of gold when cut
 and heated lose its lustre?
 Can sugarcane when squeezed
 in a press and heated
 lose its sweetness?
 So, also, can this body of mine
 in a female form and ephemeral
 in existence not contain deep
 and abiding love for the lord?*

Akka Mahadevi's compositions depict that body was no obstacle for her, but a site, a medium by way of which her piety and perseverance towards Shiva was conveyed. Her perception of God was not narrowed within the patriarchal construct. She did not relinquish her individuality, the female identity, which is fabricated by the body, rather worked within the framework of physical firmness, brilliantly articulated through her *vachanas*.

Her compositions are of immense poetic merit, characterised by simplicity of expression. They are replete with references to the daily chores, turmoil and tribulations that beset one's lives. All her works end with the mention of Shiva as 'Chenna Mallikarjuna'. The simplicity and care with which she expressed herself can be understood from the following composition.

*Associating with the ignorant is
 like to light a fire
 by rubbing stones; associating
 with the wise is like taking
 butter after churning curd
 Oh! Chenna Mallikarjuna,
 jasmine tender, associating
 with your devotees is like a hill
 of camphor catching fire.*

This popular *vachana* by Akka Mahadevi is a prayer to Lord Shiva for blessing the human race with strength and equanimity.

*After building a house on the
 mountain, how can you be
 afraid of wild animals around it?
 After building a house on the
 seashore, how can you be afraid
 of the lofty waves?
 After building a house in a
 shanty town (flea market), how
 can you be concerned with
 the noise? Oh! Lord Chenna
 Mallikarjuna, listen!
 While born and living in this*

*world, the praise and blames
come along; you have to face
them without getting angry and
maintain the calmness of mind.*

*“All mankind are my parents”
“Having been born in this world
We must be calm, without
being angry”*

The works that she left behind in a short span are popular among people across different sections of society.

She has also been depicted as Meera Bai of the South. The reason for comparing her with Meera Bai is that both the women saint poets had renounced worldly pleasures, and had suffered family and societal wrath.

As a mystic poet, she is known for enriching the Kannnda literature through her *vachanas*. The title ‘Akka’ was given to her by Veerashaiva saints like Basavanna, Chenna Basavanna, Kinnari Bommayya, Siddharama, Allamaprabhu and Dasimayya. Her works have inspired both men and women in the time she composed and continue till date.

She overcame the hardships put forth by her family and others. It was her conviction that gave her courage and confidence to follow the path of devotion. Some of the messages in her *vachanas* relate to society and daily life, such as the following.

CONCLUSION

Teachers can explain the message of Akka Mahadevi’s *vachanas* to children. They may also refer to the messages in her *vachanas* while teaching. Akka Mahadevi believed that everyone irrespective of gender has the right to follow one’s conviction and faith. Her life and work can serve as examples to contribute to the development of self concepts in young minds, particularly, girl children at the primary stage of education, and instill confidence in them, an important quality that may be emphasised by teachers. Additionally, confidence while communicating ideas, developing expression skills — both oral and written — and all forms of creativity can be encouraged in the children. A brief introduction about a prominent woman like Akka Mahadevi will empower girl children as they can internalise the fact that given an opportunity they, too, can excel in any field that they want.

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Primary Students' Mastery on Minimum Learning Competencies in Cognitive Areas based on Gender

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Abstract

The purpose of the study is to find out the mastery of primary school students on minimum level of learning competencies in cognitive areas in relation with their gender. The primary data were collected by administering three standardised achievement questionnaires of NCERT (Hindi, mathematics and environment studies) on 600 primary and elementary school students from 30 schools (20 from Haryana and 10 from Chandigarh). The data were analysed with the help of descriptive and non-parametric statistics. The study revealed a significant difference existed between boys and girls as regards to mastery on minimum level of learning competencies in cognitive areas. Girls showed a higher level of minimum level of learning in Hindi than boys. It was found that both boys and girls did not notice any statistical difference in mathematics and environmental studies. Overall, only 21, 10 and 8 per cent students were found to have achieved mastery on minimum level of learning competencies in Hindi, mathematics and environmental science, respectively. On the basis of the findings, it is suggested that teachers, educational institutions and administration take care about the evaluation of learning competencies and feedback. Besides, constructive approach must be adopted in teaching at the primary level for ensuring better performance by students.

INTRODUCTION

Universal achievement in elementary education means that all students receive quality education. Various

reports, surveys and research studies point out that the aim of achieving universal quality of education has not been met due to the use of conventional

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instructional strategies and poor quality of instruction material. Besides, the teaching-learning and evaluation process being followed in schools at the primary and elementary level is faulty. One of the biggest reasons behind not being able to achieve universal quality education is that educational institutions have no defined national achievement standards of learning.

To achieve universal quality of elementary education, a programme titled Minimum Level of Learning (MLL) was suggested to be adopted at each stage of primary education by the National Policy on Education (NPE), 1986. The MLL programme set performance goals for learning process and evaluation to ensure that all students attain the minimum level of learning at the primary stage.

The NPE-1986 focuses on essential aspects of the Universalisation of Elementary Education (UEE). It calls for paying immediate attention to the following.

- Improving the unattractive school environment like the condition of buildings and lack of instructional material
- Laying down the minimum level of learning so that all children completing different stages of education are able to achieve universal achievement in education

Hence, MLL's approach can be defined in a variety of ways, for example in terms of learning competencies and behaviour of

children studying in different classes. Each learning competency can be further delineated in terms of sub-competencies while specifying the content inputs or measures of learning. Overall, MLLs are a set of rational criteria adopted for judging the adequacy of curricular inputs provided and learning outcomes to be expected at a particular level of education. Hence, the focus of the curriculum and organised teaching-learning activities is to provide content of facts and information that would have more relevance to the life or needs of a majority of students studying at the primary level. On account of evaluation, emphasis is laid on establishing an accountable education system and its functionalities can be reflected in the actual achievement of the learners.

Besides, the NCERT (1991) also emphasises recognising the need for rectifying this prevailing anomalous situation with respect to quality.

REVIEW OF LITERATURE

Review of the available literature represented the students' academic achievements in relation with their gender (review regarding MLL in students in terms of gender is not available).

A study was conducted by Tiwari (2007) on 1200 students (624 male and 576 female) studying in Class V of different districts in Uttar Pradesh. The result vindicates that demographical and socio-economic factors like gender, caste, education,

occupation and income of the family, and location of schools had a significant effect of the dropout and attendance rate in schools.

A similar study was conducted by Khatoon and Mahmood (2010) on 863 male and 789 female students studying in 15 secondary schools of Uttar Pradesh. The findings showed that among the three independent variables, school type had the greatest influence on mathematics achievement (46 per cent), mathematics anxiety stood second, while gender showed no significant influence. Further, male students reported more mathematics achievement than female students. Students with low mathematics anxiety showed the highest achievement scores.

Ahmar and Anwar (2013) examined the effects of gender and socio-economic status of a family on the academic achievement of higher secondary school students in Lucknow, Uttar Pradesh. A sample, consisting of 102 male and 98 female students in the age group of 15 to 19 years from five higher secondary schools in Lucknow was selected for the study. The result of the study shows that gender does not influence achievement in science at the higher secondary (Class XI) level.

In a study conducted by Kulkarni (2013), 60 male and 120 female students from three ashram schools in tribal areas were selected as sample. There existed no major impact of gender and grade on the academic

achievement of the students. The study concluded that the role of gender in academic performance is limited.

The review of various literature shows that a number of factors influence the students' levels of achievement in learning. Most of the literature review, particularly, focus on the learning achievements and factors affecting the learning achievements of students. Some research studies define that gender influence the academic achievements of students, while others suggest that there is no effect of gender on the academic achievements of the students.

OBJECTIVES OF THE STUDY

The paper aims to find out the minimum levels of learning in the cognitive area (Hindi, mathematics and environmental studies) of primary school students in relation with their gender.

HYPOTHESES OF THE STUDY

- There is no significant difference between different levels of MLL in Hindi in relation with the gender of the students.
- There is no significant difference between different levels of MLL in mathematics in relation with the gender of the students.
- There is no significant difference between different levels of MLL in environmental studies in relation with the gender of the students.

RESEARCH METHODOLOGY AND COLLECTION OF DATA

Research methodology

The present study is descriptive in nature, so survey method has been adopted for the collection of data. The cognitive domain of students in languages (Hindi), mathematics and environmental studies (including social studies and sciences) has been covered in the study. Three standardised questionnaires of Hindi, mathematics and environmental studies of NCERT (1991) were administered on to 600 primary or elementary school students from Haryana and Chandigarh. The sample was taken from 30 schools (20 from Haryana and 10 from Chandigarh).

Multi-stage sampling technique was used to ensure that the sample obtained was evenly distributed with regard to the socio-economic condition, demography and location of the students. The sample was taken from both rural and urban areas. For the sample, 20 to 25 students were selected from each school. Out of 600 students, only 523 responses were considered appropriate for analysis.

Statistical techniques

The data collected were subjected to statistical analysis, using appropriate tools. Descriptive and non-parametric statistic techniques like frequency, Chi-squares, etc., were used to analyse the data.

ANALYSIS AND INTERPRETATION

Of the total sample size of 523, 245 (47 per cent) were boys and 278 (53 per cent) girls. The analysis and interpretation with regard to primary school students' mastery on the minimum level of learning competencies in cognitive areas in relation with gender are discussed in the following paragraphs.

MLL in cognitive areas on the basis of gender

The main objective of the study was to analyse the minimum level of learning of primary school students in cognitive areas (Hindi, mathematics and EVS) in relation with their gender. Chi-square test was administered for the purpose.

MLL in Hindi on the basis of gender

The primary school students' (boys and girls) minimum level of learning in Hindi is presented in Table 1.

Table 1: MLL of primary school students in Hindi in relation with gender

Gender	Minimum Level of Learning in Hindi (%)			Total
	Mastery	Partial mastery	Non-mastery	
Boys	43 (17.6)	85 (34.7)	117 (47.8)	245 (100)
Girls	68 (24.5)	106 (38.1)	104 (37.4)	278 (100)
Total	111 (21.2)	191 (36.5)	221 (42.3)	523 (100)

$$\chi^2 = 6.64, \text{ d. f.} = 2, \text{ P} > 0.05 \text{ (two-tailed)}$$

Table 1 depicts the minimum level of learning of primary school students in Hindi in relation with their gender. Overall, 42.3 per cent students do not have mastery on the minimum level of learning in Hindi. It is also indicated that 36.5 per cent students from both the gender have partial mastery on the minimum level of learning in Hindi. On the contrary, more girls around 24.5 and 38.1 per cent have mastery and partial mastery, respectively, as compared to boys as regards to the minimum level of learning in Hindi. Most boys (47.8 per cent) have non-mastery on the minimum level of learning in Hindi as compared to girls (37.4 per cent).

The value of the data calculated as per the Chi-square test came out to be 6.64, which was greater than the tabulated value at degree of freedom (2), i.e., 5.99. It was found significant at the 0.05 level of significance. Therefore, the null hypothesis that there is no significant difference between minimum levels of learning in Hindi in primary school students in relation with gender is rejected.

On the basis of the above analysis, it can be concluded that there exists a significant difference between the minimum levels of learning in Hindi among boys and girls at the primary stage. Girls have a higher level of minimum level of learning in Hindi as compared to boys.

MLL in mathematics on the basis of gender

The boys and girls in minimum level of learning in mathematics is depicted in Table 2.

Table 2: MLL of primary school students in mathematics in relation with gender

Gender	Minimum Level of Learning in mathematics (%)			Total
	Mastery	Partial mastery	Non-mastery	
Boys	21 (8.6)	38 (15.5)	186 (75.9)	245 (100.0)
Girls	32 (11.5)	42 (15.1)	204 (73.4)	278 (100.0)
Total	53 (10.1)	80 (15.3)	390 (74.6)	523 (100.0)

$$\chi^2 = 1.23, \text{ d. f.}=2, P<0.05 \text{ (two-tailed)}$$

The data given in Table 2 reflect that most primary school students, irrespective of gender, i. e., 74.6 per cent have non-mastery on the minimum level of learning in mathematics. It is also noticed that around 15 per cent students from both the gender have partial mastery over the minimum level of learning in mathematics. Around 11.5 per cent girls and 8.6 per cent boys have mastery over the minimum level of learning in mathematics. Mostly, boys do not have mastery over the minimum level of learning in mathematics, i.e., 75.9 per cent as against 73.4 per cent girls.

The calculated value of the Chi-square test was 1.23, which is

lesser than the tabulated value and not found significant at any level. Thus, the null hypothesis that there is no significant difference between the minimum levels of learning in mathematics for primary school students in relation with their gender is not rejected.

The analysis of the data inferred that primary school students (boys and girls) had not noticed any statistical difference. Thus, the students (boys and girls) possessed almost similar levels of minimum level of learning in mathematics.

MLL in environmental studies on the basis of gender

The minimum level of learning in environmental studies (EVS) of primary school students (boys and girls) is presented in Table 3.

Table 3: MLL of primary school students in EVS in relation with their gender

Gender	Minimum Level of Learning in EVS (%)			Total
	Mastery	Partial mastery	Non-mastery	
Boys	20 (8.2)	35 (14.3)	190 (77.6)	245 (100)
Girls	24 (8.6)	33 (11.9)	221 (79.5)	278 (100)
Total	44 (8.4)	68 (13.0)	411 (78.6)	523 (100)

$\chi^2 = 0.68, \text{ d.f.}=2, P<0.05 \text{ (two-tailed)}$

Table 3 reveals that most students having partial mastery over the minimum level of learning in

EVS are boys (14.3 per cent), while girls stand at 11.9 per cent. It is also noticed that 8.2 per cent boys and around 8.6 per cent girls have mastery over the minimum level of learning in EVS. Approximately, 7.6 per cent boys and 79.5 per cent girls have non-mastery over the minimum level of learning in EVS.

The calculated value of Chi-square test stood at 0.68, which was found less than the tabulated value and not found significant at any level. Thus, the null hypothesis that there is no significant difference between the minimum levels of learning in EVS in primary school students in relation with their gender is not rejected.

The data show that there exists an absence of significant difference between the minimum level of learning in EVS among boys and girls. Thus, primary school students (both boys and girls) possess almost similar level of MLL in EVS.

CONCLUSION

The findings of the study reveal that there exists a significant difference between boys and girls as regards to mastery on minimum level of learning competencies in cognitive areas. Girls have higher minimum level of learning in Hindi as compared to boys. This may be considered because females, generally, have better linguistic skills than boys. Moreover, Hindi was found to be the favourite subject of most girls, which made them spend more time studying

it and completing their class and home assignments on time.

An absence of significant difference between minimum level of learning in mathematics and EVS was noticed among boys and girls. Thus, boys and girls possessed almost similar levels of minimum level of learning in mathematics and EVS as they studied the same concepts of the subjects, and had the same curriculum and learning environment at schools.

Overall, only 21, 10 and 8 per cent students had achieved mastery on the minimum level of learning competencies in Hindi, mathematics and EVS, respectively.

On the basis of the findings, it is suggested that teachers, educational institutions and administration take

care about the evaluation of students and their feedback. Moreover, a constructive approach must be adopted in teaching at the primary level so as to encourage the students to perform better.

The findings of the study suggest that the government must take care of the students' minimum levels of learning in cognitive areas. It must also ensure to promote quality education by incorporating programmes for continuous professional and character development of teachers, pre-service teacher trainings and imparting appropriate competency-based learning skills to students. A two-way critical evaluation of students' learning and teachers' teaching is essential for quality education.

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Writing for the Ears!

Ajit Horo*

Abstract

The conventional way of education, coupled with audio and video resources, can help in understanding and retention of subjects or concepts. The paper, with respect to challenges faced in the education sector, elaborates the impact of adding complementary elements of mass media technology. Further, it categorises the different factors on which learning is dependent.

INTRODUCTION

Education technology plays a significant role in the area of school education. In today's schools, teachers are encouraged to use teaching aids like audio, video, graphics, etc., to supplement their classroom teaching. The demand for such aids has considerably increased since the last decade.

The National Council for Educational Research and Training (NCERT), an apex body for promoting school education in India, has been working extensively in this area. The NCERT has six constituent units. One of which is the Central Institute

of Educational Technology (CIET). The CIET is a nodal agency dedicated to promoting the use of mass media technology for expanding and improving the quality of education at the primary and secondary school level. The Institute is funded by the Ministry of Education, erstwhile Ministry of Human Resource Development, Government of India.

The CIET has many projects and programmes. One such programme is the National Repository of Educational Resources (NROER), a collaborative platform that brings together people interested in school and teacher education. Initiated by

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the Department of School Education and Literacy, Ministry of Education, Government of India, the NROER is managed by the CIET. The Repository was developed to address the challenges faced by the education sector in our country. It offers digital resources for all school subjects and grades in multiple languages, such as educational videos, audios, graphics and images, documents and interactive modules. Besides, it allows one to contribute one's own resources.

LISTENING — A KEY SKILL

Listening is a key skill in language comprehension. Language teachers, in particular, are familiar with the concepts of LSRW (Listening, Speaking, Reading and Writing). If listening as a skill is developed among learners, it will benefit them immensely in learning not only a language(s) but in other subject areas as well. However, due to practical problems in making texts available (quality recordings), the listening aspect is largely neglected in schools.

A person will listen to an audio programme only if it seems to be of interest. In other words, it is important to capture the listener's interest. This requires an engrossing and attractive script. The script for an audio programme will be different from that of a newspaper article or report and even a video programme. In audio, one writes for the ears and lets the listeners' imagination to do the rest. This means one is

writing not for the eyes but for the ears. In print, a person can always get back to what was written in the earlier paragraphs just by turning the pages. Of course, one can press the pause and rewind button in audio programmes, but this process is slightly more time-consuming, and hence, distractive as compared to reading.

Few points that must be kept in mind while developing an audio programme are as follows.

Identification of content matters

The most important aspect for writing in any media format is the selection of content or identification of a topic. There are many subjects but the most important is selecting a topic suitable for an audio programme. For example, one must avoid writing on complicated calculations of mathematics, physics or economics for an audio programme. Instead, one must choose interesting parts from history, language or perhaps simple science concepts, and so on.

Length of sentences

Long sentences are tedious to listen to, and hence, boring. Most of the time, the listener loses track and forgets the context being talked about. Moreover, long sentences do not serve the purpose, which is to capture the listener's attention. A lengthy sentence would mean going through many words, which makes it hard to process the information. Besides, the original idea or overall message may get lost in this sea of words. If the script is heavy,

laden with long-winded sentences with complex words, the listener will switch off the recorder, and certainly not be attentive. Consider the following example.

We left the parcel in a narrow street by the church, while Navin, our leader, entered the shadowy doorway of a tall building, some of which consisted of residential flats and some seemed to be empty offices.

The above sentence has 38 words and cannot be considered short. But it is easy to understand. This is 'writing for the ears'. The main subject, 'we' is uttered right in the beginning. The sentence goes on to introduce the second subject 'Navin' and verb 'entered', providing clarity to the listeners.

A man stopped by the police in New Delhi more than two years ago on suspicion of drunk driving recently was lucky enough to have all charges against him dismissed by a judge.

The sentence is not only too long but lacks clarity as well.

You may think that long sentences need to be broken into shorter sentences so that the basic idea is conveyed effectively. The present generation tends to use shorter sentences. Perhaps, it is the influence of SMS and e-mails. It also reflects the lack of time in today's fast-paced world. However, the question is not whether to use long or short sentences, but whether a sentence is communicating what is intended to be communicated.

Too many long and complicated sentences, one after another, will slow the pace of comprehension. Yet, too many short sharp sentences, uttered in quick succession, will in all likelihood confuse learners. Consider the following examples.

My essay is not good. It's too short. It doesn't flow well. It won't interest anyone. They won't read it.

Notice how the writing in this example seems broken. Now, let us examine whether this writing can be improved by 'writing for the ears'.

My essay does not look good because it's too short and doesn't have flow. Readers are likely to lose interest.

Factors affecting listening comprehension

Long sentences loaded with alien words and relative clauses, usually, do not work well in the audio medium. We must try not to overwrite. Being concise is one of the important factors of communication skill. Some of the factors that affect listening comprehension are as follows.

Clarity

This refers to the structuring of a sentence, whether it is carefully thought out or a carelessly written one. Often, people use words carelessly. 'Carelessness' indicates not lack of knowledge or poor grammar but is symptomatic of deeper malaise mental laziness. In an audio programme, it is the words that speak. Errors in

punctuation, plural forms, etc., are easily prevented, provided one pays attention. The following are examples from various research papers and articles. Errors in the preceding examples do not require specialised knowledge of English to be identified.

A carelessly written sentence, for example, would be like this. Most Indian households have a number of children whose needs are much higher than their earning.

If the script is weak, the programme will collapse. But if the script is clear, flowing and strong, half the battle is already won. In other words, a quality programme cannot be made out of a boring script. However, the need of recapitulation cannot be denied. Thus, the length of a sentence is immaterial. It is the clarity of thought that counts.

Accuracy

The script must always convey accurate information. The act of processing information through the ears is different from visual and graphic inputs. Therefore, it is important that the script provides the required information in sequence. Further, the language used should be age appropriate with familiar vocabulary. Use words that correctly convey the intended meaning, for example, there is a difference between ‘starving’ and ‘fasting’, and ‘refuse’ and ‘deny’. Scientific or technical terms and jargons may be used only if relevant to the programme. Only well-known abbreviations should be used. One must follow what famous

English novelist George Orwell once said, “Never use a long word where a short word will do.”

Visualisation

Remember, audio medium is, in fact, talking to a blind friend. One does not have images, graphics, scenic elements, etc., which are available in a video programme. As there are no pictures to reinforce the words, the audio must be able to ‘paint the pictures’. The script should weave words in such a way that the listeners are able to visualise what they actually hear. The choice of words and the way they are delivered matter a lot. For example, ‘the dog’ would provide an image. But the words ‘brown hairy dog’ provide a richer mental image.

Tone

Some people think that using heavy and uncommon words in audio is education. This is a myth. The script must be conversational and the narration be natural as if a story is being narrated to a friend. One must use phrases and words that are commonly used. It must be remembered that while reading aloud the narration, the person must sound like oneself. The presenter must consider the ears of the listeners as their eyes so that the audio is able to create an imagery in their minds. It must be ensured to give the listeners a chance to imagine the people, places and things in the story being talked about in the audio medium.

Sound effects

In audio programmes, one can make use of voice, music and sound effects. The presenter is challenged to create mental images in audience just by sound. In an audio programme, words are spoken. Nuances of meaning can be added through voice modulation. Small sentences are registered easily and become powerful if spoken with emotion and voice modulation. One must always prepare the script in a way so that there is enough space for sounds to be accommodated. The script must have possibilities for using various sounds. Stories on forest, rivers, sea, volcano, aircraft, space crafts, birds, bird sanctuaries, wars, festival, public places, etc., is suitable for a radio script as these topics have a vast scope for the inclusion of different sounds. Undoubtedly, there are exceptions. Some other topics can also be included, in which only the background music or powerful rendering of eloquence plays a pivotal role, such as in a documentary, feature and radio magazine.

Try to draw the listeners to the story by setting up an interesting scene, raising a question, playing some weird noise or musical intervals while introducing a character. Use narrative elements like suspense and scene changes to move the story along. No one likes to be sermonised, so it is better to conclude a programme open ended and enthruse listeners to decide by themselves.

Gyan Vani, the educational FM channel of the government, is operating in more than 40 stations and broadcasting audio programmes. The major *Gyan Vani* FM stations are in Delhi, Lucknow, Bhopal, Patna, Indore, Mumbai, Jaipur, Prayagraj, etc.

These programmes have been developed in a way that they are easily incorporated into the day-to-day learning experiences of school going and out-of-school children. They can be used in the classroom, as well as, at home. These programmes are also useful to teachers as exemplar material in areas not elaborated in textbooks but being part of the curriculum. These are packages, especially meant for the teachers. The Audio Production Division of the CIET produces more than 600 audio programmes for children aged 3 to 6 years, 5 to 8 years, 8 to 11 years, 12 to 14 years and 15 to 16 years.

These programmes cater to the needs of the all areas of education, which are as follows.

- Pre-school, elementary, secondary, senior secondary education
- Science and mathematics education
- Social sciences and humanities
- Teacher education and extension
- Education of children with special needs
- Women's studies
- Value education

CONCLUSION

To cater to the existing requirements of the programmes, the CIET has been producing audio programmes for broadcast, as well as, non-broadcast modes to make learning an

interesting and engaging experience for children. The audio programmes are broadcast by All India Radio (AIR) and community radio, and thus, reach children in the remotest areas of the country.

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BOOK REVIEW

Nuggets – Reflections on Language Education

Sandhya Rani Sahoo*

Title of the Book : *Nuggets – Reflections on Language Education*

Author : Varada M. Nikalje

Publication : Jadabharata Prakashana, Dharwad, Karnataka

Year of Publication: 2016

Total No. of Pages : 102

Price of the Book : ₹100

The book, *Nuggets – Reflections on Language Education*, by Varada M. Nikalje makes an interesting and insightful reading for those engaged in language education. It is a collection of articles that focuses on four central themes — the nature of meaning, language usage, language cognition and relationship between language and reality.

Language education is a comparatively recent branch of knowledge. Most research work done in

this field is contained in articles and books suitable to educationists and researchers. Concepts in language education are seemingly concrete and defined. However, a teacher, who is at the lowest rung of the hierarchical ladder in school education, hardly ever gets to know about the latest theories. The book serves to give the teacher, parent and educated layman a basic understanding of language education.

‘Nuggets’ that form a part of the title of the book refer to the

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perceptions that have been captured from the routine experiences of the author's professional life. These include development of English textbooks, being on committees for the development of language curriculum, teacher training material and teaching of trainees from other countries. The articles in this collection address a gamut of issues and ideas.

The first chapter introduces a reader to a temple honouring the Goddess of English in a small village in Uttar Pradesh. At present, the image of the goddess has been installed in a makeshift shrine. The foundation stone has been laid for a larger edifice. The author uses this as the starting point to elaborate on the visible presence of English in India.

The second chapter analyses the belief that some languages are 'superior' — a belief found in fairly large numbers across the world. The chapter states that all languages are equal — not in terms of chronology or prestige — but that they were created out of the common necessity of communication.

The third chapter talks of the content of textbooks, and remarks that textbook writers are often focused on disseminating information that they become heavy and boring. The author advocates a conversational tone and a bit of humour to retain the interest of the students.

The next chapter talks of tales from *Panchtantra* and their inclusion in school textbooks.

The fifth chapter is a comment on the dismissive attitude of elders to the utterances of children, ending with an appeal to the elders to listen to the little ones, for they may have something significant to communicate.

The chapter that follows goes deep into the notion of the explosion of knowledge in school textbooks of the twentieth century. This contributed to the practice of rote-memorisation of information without understanding.

The seventh chapter, 'Saying Hello to the Textbook', is a humorous take on the fact that most teachers do not read the 'Teacher's page', a regular feature in the prelims section of textbooks.

The eighth chapter warns of the assumptions that one might make with regard to schools, textbooks or classroom teaching.

Chapter nine endorses the use of dictionary and gives interesting shippers on the origin of dictionaries in various languages.

The last chapter talks about reading culture or rather the lack of it in present day school teachers. The author reiterates that, morally speaking, a teacher cannot ask a child to read less.

If readers are looking for qualitative research into the latest theory of education or quantitative

analysis of statistical data collected painstakingly over the years, they would be disappointed. This book reflects interest in life, in general, blending theories of language education with socio-philosophical perspectives. What comes through is the author's love and appreciation for language and literature.

The book has been brought out at an appropriate time. To language teachers, the present time is both disturbing and challenging. There are

many schools, where the conventional routine of teaching is rooted and perennial. But the winds of change are blowing. There are now schools, which endorse that learning to learn is more important than mere acquisition of knowledge, and that fear of examinations should be eliminated.

The book makes a valuable resource in our country where language education is not given enough thought and few write about it from an informed point of view.

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DID YOU KNOW

Snakes and Ladders since Ancient Times

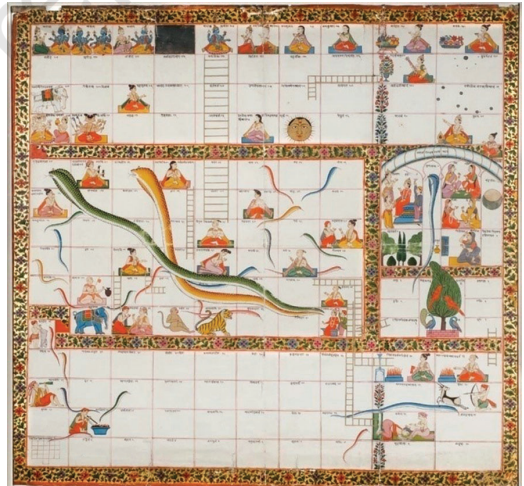
Satya Bhushan*

The board game popularly known as ‘Snakes and Ladders’ originated in ancient India, where it was known by the name *Mokshapator Moksha Patamu*. Known by different regional names, the game was, usually, played in most North Indian regions as *gyan caupar* (*chaupar* of knowledge or gnosis) or *gyan baazi* (game knowledge), in Nepal as *nagapasa* (snake dice), and in Maharashtra as *moksapata* (cloth or board of liberation).

Also known as ‘Chutes and Ladders’, Snakes and Ladders is based on an ancient Indian game that was designed to teach morality. Initially, the game was designed to teach the principles of virtue, represented by ladders, and evil, represented by snakes.

It is worth mentioning about two late-nineteenth-century references to *gyan caupar* that have come to light — from a Brahmin author at Aurangabad in Maharashtra and a British magistrate at Saharanpur in Uttar Pradesh. These are the first

descriptions of the game. The earlier of the two descriptions appear as *Kridakausalya* (Skill of Playing) of 1871 by Harikrishna, son of Venkataramana. In his discussion of the popular games of Maharashtra, Harikrishna devotes a short passage to *jnanapatta*, meaning ‘the board of knowledge’.



Snakes and Ladders, c.1800
(Head Cat. 051.001)

* Assistant Professor, Education Survey Division and International Relations Division, NCERT, New Delhi.

It is perhaps no surprise that the game 'Snakes and Ladders' develops mathematical skills like counting, one-to-one correspondence, numeral recognition, sequential numbers and mathematical language in students. The interesting point to be noted is that Snakes and Ladders not only develops counting skills in students but also basic addition skills. Besides, children learn the basic sequence and pattern of numbers. Instead of using one dice, the children are required to combine the added total of two dice. By performing this complex skill within the confines of the game, they have the opportunity to engage in more complex multiplication sequences.

Snakes and Ladders can also be used as a language arts activity. The game helps the children develop social and language skills. Concepts, such as behind/in front/up/down and under/over, and time and mathematical concepts like before/after, first, second, third, etc., can be taught with this game.

Researchers have suggested that Snakes and Ladders should be used as a medium of learning. It is beneficial for students with learning difficulties and helps in their cognitive development. Through this game, teachers are able to make the teaching-learning process more interesting, effective and meaningful, ensuring active participation of students in learning activities.

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Training the untrained In-service Teachers — A personal account

Shanon Dias*

I got a chance to attend Diploma in Elementary Education (D.El.Ed) programme 2017–19 designed for in-service untrained teachers working in primary and upper primary schools in different States of the country. This helped me hone my skills as a teacher.

The programme was developed by the Academic Department, National School of Open Learning (NIOS), on the initiative of the Ministry of Education, erstwhile Ministry of Human Resource Development (MHRD), Government of India, keeping in view the National Curriculum Framework (NCF) 2005, Right to Education (RTE) Act 2009 and National Curriculum Framework for Teacher Education (NCFTE) 2010. The programme aimed to develop necessary skills, competencies, attitudes and understanding in teachers through topics, such as 'Elementary Education in India — A Sociocultural Perspective' and 'Pedagogic Processes in Elementary Schools' to make the teaching-learning process more effective.

This course emphasised the point that both classroom learning and co-curricular activities work together to give young children a strong base on which their academic development and career depend.

The main aim of this course was to ensure that students get the best education by providing teachers with instructional and material support. This ensured that the process of education continued for those of us, who wanted to make a career in the field of education.

Needless to say, getting a diploma and completing regular work hours can be grueling. But in this case, the pros outweighed the cons. While it may have remained a somewhat cumbersome task, it was a learning experience for many. This is true as this gave the teachers, especially, female teachers, a chance to return to thinking of education as not only a prerequisite for employment but as a valuable contributor to the self-esteem and holistic development of children.

* *High School Teacher, Manovikas School, Mudgaon, Goa.*

While the course, conducted for in-service teachers, involved attending regular classes after working hours and submission of assignments, it served to provide valuable insights into classroom management and teaching methods.

The first subject was 'Elementary Education in India — A Sociocultural Perspective'. It dealt with introducing education in India as much as a social construct as political or economic one. Education in India has always been as much about interpersonal relationships as it has been about achievement. This is, especially, true when it comes to learning a language. In this course, we learned that education is not merely passing information but rather a web that links the students and teachers over time. One of the most important factors is that how much the teachers are themselves willing to learn and grow alongside the students.

Focus was not about how many facts a teacher can coerce a student to absorb but rather how effective the process of teaching appears to be. Another interesting subject taught was 'Pedagogic Processes in Elementary Schools'. This subject involved coming up with an effective lesson plan to teach an excerpt from *Robinson Crusoe* for Class IV. There were no specific instructions as regards to the kind of teaching aids we were to provide. The teaching aid that we developed for this subject was a small paper wheel, on which simple words were written. A child

could swirl the wheel and use the words given in the wheel to form phrases or sentences.

The course urged the in-service teachers to reconsider the methods currently being used in the teaching-learning process.

The course emphasised that the ways through which a child learns is subject to constant changes. Hence, keeping up with the current teaching-learning methods or trends is important to ensure that teaching does not become stagnant. This is, particularly, with reference to teaching English to a child as a second language.

Rather than expecting a child to match an adult's level of knowledge or performance, emphasis was laid on teaching verbal communication skills to children along with the written script. These days, teaching should involve more number of activities than routine. The course emphasised that when teaching a new topic to a child, it makes sense to use new methods of learning whenever possible. Emphasis was laid on teaching a child English through use and communication rather than simply forcing them to memorise phrases.

The course stressed on making effective lesson plans. It encouraged the in-service teachers to use creative skills, such as directing students to put up short plays during assemblies, show students that language and literature are important in education and entertainment, and the two can always go hand-in-hand. Two such

examples are discussed here. An assembly involved the portrayal of the poem *Television* by Roald Dahl as a monologue. Another example is the five-minute play of Nissim Ezekiel's *Irani Restaurant Instruction*.

One major point that the course aimed at was preparing a class for the activity of learning by actually making the in-service teachers engage in some sort of physical activity outside the classroom beforehand. This helped reduce boredom and increase productivity.

This impressed on me that today's young learners need forms of stimulation that do not conform to memorisation and instruction, and make learning a living experience.

The course also provided teachers from different schools a chance to interact with each other. This interaction brought out the fact all teachers had certain hobbies or talents, apart from just academic knowledge.

The course was a learning experience in both theoretical and practical sense. It emphasised that while rote learning may be the norm, it certainly does not encourage deep knowledge and good learning habits for learners in higher education.

Returning to education, now, meant having to learn the right ways to connect to the younger generation of learners.

While the first year of the course mostly involved general subjects like classroom management and lesson plan, the second year involved more

subject-based learning, humanities or sciences.

It was emphasised that the teaching-learning process in social science should help the child acquire knowledge and skills in an interactive environment. It was also an opportunity for teachers and students to learn together. There will always be a necessity to shift from the mere passing on of information to active involvement in group activity, debate and discussions. This keeps both learners and teachers alive to social realities.

The course suggested the following to help make teaching-learning process in social science participatory.

- Teachers should assume the role of coach or guide while giving group work to students.
- Classroom resources are best put to use when shared and are used to teach students to cooperate with each other.
- Teachers should construct circumstances for students to express their opinions and understand each others' points of view.

The course also highlighted that school linked community. Schools depend on communities for resources as much as communities depend on schools to provide capable individuals. The in-service teachers were encouraged to plan and participate in community outreach programmes, such as tree plantation

or anti-littering awareness drives that encouraged young learners to value education and apply the same in real world.

CONCLUSION

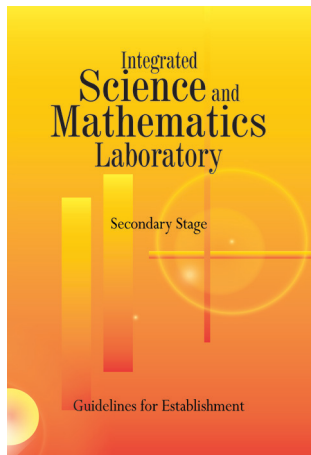
The course was designed, especially, for working teachers and to deal primarily with teaching at the elementary level. The target group consisted of teachers from different backgrounds and from schools with varying access to learning resources.

As far as experience on an individual level goes, the D.El.Ed

course and subsequent group project work gave teachers a chance to, particularly, enhance their mental faculties and encourage each other to use and perhaps even design newer ways of teaching. Group discussion among in-service teachers remain as important as among students in a classroom. The course provided working professionals with a step ahead in their academic career, something that working mothers, who are teachers rarely get a chance to do, and gave everyone a chance to go back to education in a way that was both enlightening and productive.

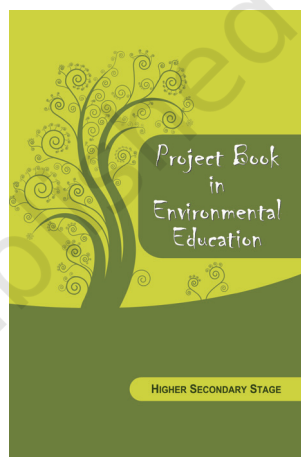
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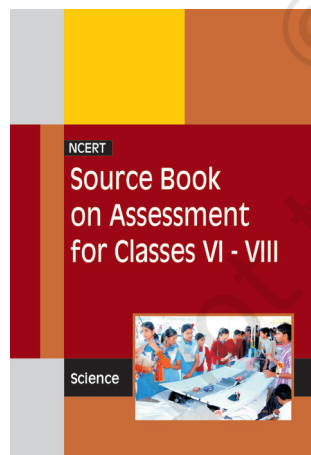


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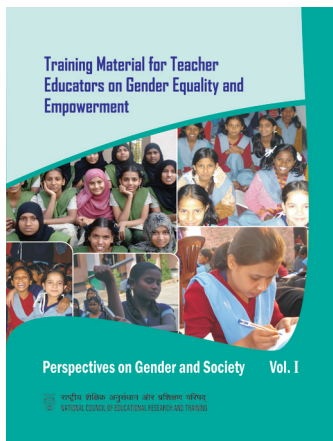
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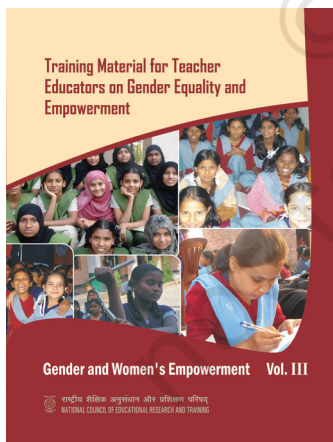
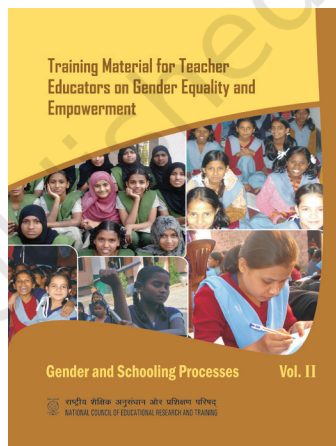
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