The Primary Teacher

Volume XLII Number 1 January 2017



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.

© 2021*. Copyright of the articles published in the journal will vest with the NCERT and requests for reproducing the material should be addressed to the Academic Editors.

Advisory Board

 ${\it Director~(In~charge),~NCERT~:~Sridhar~Srivastava}$

Head, DEE : Suniti Sanwal

Head, Publication Division : Anup Kumar Rajput

Editorial Board

Academic Editors : Anup Kumar Rajput

Varada M. Nikalje

Chief Editor : Shveta Uppal

Publication Team

Chief Production Officer : Arun Chitkara Chief Business Manager : Vipin Dewan Production Assistant : Om Prakash

Cover

Amit Srivastava

OFFICES OF THE PUBLICATION DIVISION, NCERT

NCERT Campus

Sri Aurobindo Marg

New Delhi 110016 Phone: 011-26562708

108, 100 Feet Road Hosdakere Halli Extension Banashankari III Stage

Bengaluru 560085 Phone: 080-26725740

Navjivan Trust Building

P.O. Navjivan

Ahmedabad 380014 Phone: 079-27541446

CWC Campus

Opp. Dhankal Bus Stop

Panihati

Kolkata 700114 Phone: 033-25530454

CWC Complex

Maligaon

Guwahati 781021 Phone: 0361-2674869

Single Copy: ₹ **65.00** Annual Subscription: ₹ **260.00**

Published by the Head, Publication Division, National Council of Educational Research and Training, Sri Aurobindo Marg, New Delhi 110 016 and printed at Chandra Prabhu Offset Printing Works (P) Ltd., C-40, Sector-8, Noida 201 301 (UP)

^{*}Printed in June 2021

THE PRIMARY TEACHER

VOLUME XLII NUMBER 1

JANUARY 2017

CONTENTS

| E | aitoriai | | 3 |
|----|------------------------------------------------------------------------------------------|------------------------------------|----|
| Is | SUES AND POLICY PERSPECTIVE | | |
| 1. | Students' Enrolment Patterns in Schools of a Telangana Town — A Sociological Analysis | Sreeramulu Gosikonda | 5 |
| 2. | Teacher Identity Formation in the Indian Education Context | Ujjwal Banerjee | 14 |
| 3. | Tradition and Modernity — Experiences of Rural Sikh Girls in Ferozepur, Punjab | Tripti Bassi | 22 |
| 4. | School Education — The Way Forward | Ruchi Shukla | 27 |
| 5. | Human Body Portrayal in NCERT's EVS and Science Textbooks — An Analysis | Jiss Mary Thomas | 34 |
| 6. | Inclusion of Disabled Children in Indian Schools — Status and Need | Garima Tandon Sunil Kumar Singh | 42 |
| 7. | Acquisition of Leadership Skills at the Primary Stage | Ruchi Dwivedi | 50 |
| В | OOK REVIEW | | |
| | Jungle ki Kahaniyaan | Seema Shukla Ojha | 56 |
| D | ID YOU KNOW | | |
| | Earthquake Preparedness by Schools | Ridhi Sharma | 58 |
| M | Y PAGE | | |
| | Virtual Reality — A Pedagogical Tool for Young Learners | Nagma Sahi Ansari | 61 |



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. (Article12,13)
- 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

Education is a catalytic tool that enables us all, including students, to become agents of one's own learning through critical reflection. While education cannot solve all problems, it does impact mindsets at both individual and societal levels. Questions on gender equality, inclusion, relevance of traditions and factors influencing identity become vehicles for innovative ideas and human progress.

The lead article 'Students' Enrolment Patterns in Schools of a Telangana Town — A Sociological Analysis' by Sreeramulu Gosikonda reflects this view. The author conducted an empirical study in Huzurabad town of Karimnagar district in Telangana to understand the enrolment patterns of students in government and private schools of the State, and find out the impact of social category and gender on the schooling of children. The State witnessed an increase in the number of private schools compared with government schools. Further, the study observes that enrolment in English medium schools is increasing, whereas, that in Telugu and Urdu medium schools is decreasing.

In the second paper titled 'Teacher Identity Formation in the Indian Education Context', the author, Ujjwal Banerjee, tries to explore how current interventions to reform education influence the identity of a teacher. The paper also examines approaches of professional development required for teachers and concludes that it is possible only through self-reflection.

The article 'Tradition and Modernity — Experiences of Rural Sikh Girls in Ferozepur, Punjab' by Tripti Bassi emphasises the tradition–modernity continuum with reference to rural Sikh girls, who work in the fields and at home, struggling to juggle education in whatever time is left. The paper tries to highlight the complex interface among the forces of education, religion and gender.

The fourth paper 'School Education — The Way Forward' by Ruchi Shukla looks into various aspects of the Self-Determination Theory vis-a-vis the rising number of achievement related stress cases. The paper tries to ascertain if the Self-Determination Theory and its concepts of competency, autonomy and relatedness, which lead to intrinsic motivation, can be utilised in studying the problem of stress among students, and endorses that having trained teachers as level one counsellors can solve the problem to a large extent.

In the next paper, Jiss Mary Thomas examines the portrayal of human body in NCERT's EVS and Science textbooks. The paper tries to investigate how inclusive the textbooks are in terms of portraying differently abled body types. It emphasises that the portrayal of differently abled body types is important as the textbooks cater to a wide audience.

The paper, 'Inclusion of Disabled Children in Schools in the Indian Context — Status and Need', by Garima Tandon and Sunil Kumar Singh, too, focuses on disability and tries to analyse the educational status of disabled children in schools across the country. It points out that though various programmes and policies have been initiated by the government from time-to-time, literacy rate among the disabled population is alarmingly low. Barriers regarding the inclusion of disabled children, drawn out of various studies, have also been highlighted in the paper. The authors point out that meeting the diverse needs of CWSN is a challenge, but at the same time, it is an opportunity to enrich learning and school relations.

In the next paper titled 'Acquisition of Leadership Skills at the Primary Stage', the author, Ruchi Dwivedi, analyses the leadership skills of students and the impact of these skills on their cognitive development. Researches suggest that leadership skills can be incorporated in the cognitive domain for better understanding and systematic thought process. The paper emphasises that students need to develop problem solving skills at the primary stage of schooling, which will impact their scholastic career and also prepare them for social life.

The issue includes its regular features — 'Book Review', 'Did You Know' and 'My Page'.

This issue carries a review of the book titled *Jungle Ki Kahaniyaan*, the Hindi translation of *Cuentos de la Selva*, originally written in Spanish by acclaimed Latin American writer Horacio Quiroga. The reviewer Seema Shukla Ojha shares that the book is a collection of eight short stories with subtle moral lessons suitable for children at the elementary stage.

In the 'Did You Know' section, author Ridhi Sharma emphasises disaster management by schools, especially, earthquake preparedness. She observes that school authorities must pay attention to building construction norms and educate teachers and students in earthquake preparedness.

In the section 'My Page', Nagma Sahi Ansari reflects on Virtual Reality applied in school education. She says Virtual Reality can help create an experiential learning platform for greater autonomy and interactivity. This inculcates a sense of social learning, thereby, encouraging multicultural and diverse learning. Such a platform would be hugely beneficial for a diverse country like India.

Issues and Policy Perspective

1

Students' Enrolment Patterns in Schools of a Telangana Town — A Sociological Analysis

Sreeramulu Gosikonda*

Abstract

The primary aim of a school is the socialisation of students. According to the Right of Children to Free and Compulsory Education (RTE) Act 2009, every child has the right to full—time free elementary education in a formal school. The Act further entails that 25 per cent of the seats in all private schools must be allotted to students belonging to Economically Weaker Section (EWS) families. In India, parents' preference for English medium private schools shows their growing aspirations towards the education of their children. One State witnessing such a trend is Telangana. The State is witnessing a mushrooming of private schools. Moreover, the enrolment rate in English medium schools in the State is increasing, while it is decreasing in Telugu and Urdu medium schools. With this backdrop, an empirical study was conducted in Huzurabad town of Karimnagar district in Telangana. The study aims to understand the pattern of students' enrolment in both government and private schools. This paper aims to find out the impact that social category and gender have on the schooling of children.

Introduction

Education plays an important role in the economic development and empowerment of both an individual, as well as, society. In India, education is placed under the concurrent list. However, due to neoliberal policies of both the Central and State governments, school education in

the country is greatly influenced by privatisation. As a result, India has been witnessing a surge in the number of low–fee private schools, which aim to provide quality education to poor students at lower costs. The Right of Children to Free and Compulsory Education (RTE) Act 2009 provides a choice to parents to educate their

^{*} Assistant Professor, Loyola Academy Degree and PG College, Secunderabad, Telangana.

wards in private schools. According to the RTE Act, 25 per cent of the seats in all private schools must be allotted to students belonging to poor or Economically Weaker Section (EWS) families, where the government pays for their education.

The main parameters that parents, generally, consider while selecting a school for their wards are its infrastructural facilities, reputation, performance of its students in board exams, profile of the teachers and management, fee structure, distance from residence, transport facility, discipline among students, teaching communication skills in English, etc.

Factors causing Increase in Private Schools

The significant contribution of private schools in achieving 'education for all' in India cannot be ignored. Sunny (2011) argues that because of the Green Revolution wealthy farmers could now send their children to schools and colleges located in nearby towns and cities. The growth and popularity of private schools not only reflect the demand for imparting quality education to students but also the declining quality of education in government schools. Joshi (2008) points out that due to the lack of government schools providing quality education, parents prefer to enroll their children in private schools. Goyal and Pandey (2012) observe that poor quality of education in government

schools is the main reason for the rapid growth of private schools, which are perceived as providing both quality education and accountability.

RISING DEMAND FOR ENGLISH MEDIUM SCHOOLS

Researchers argue that English in India is viewed as a tool for participating in the global economy. Neoliberal discourses and General Agreement on Trade in Services (GATS) have pushed for the privatisation of education. In India, according to Sarangapani and Winch (2010), English as a medium of instruction and social status are the main reasons behind the growth of private schools. Researches identify that the number of private schools in the country is increasing in response to the growing demand for English medium education from lower middle class and EWS families. Even State-run schools that have regional language as a medium of instruction have started English medium sections to meet the rising demand of parents. Gundemeda (2014a) observes that lack of transport and toilet facility adversely affect enrolment of girls in government schools. English is one of the significant factors, which influences the accessibility of IT education among students (Gundemeda, 2014b). He concludes that students, who completed education with Telugu as the medium of instruction, faced problems with English while pursuing higher education.

GENDER DISCRIMINATION IN SELECTING SCHOOLS

According to Hill, et al., (2011), most girls in Rajasthan were enrolled in government schools, while boys in private schools. Researches suggest that access to private schools is favoured to boys as they stay in the family due to patrilineal marriage practices in India. It is further observed that there is a pro-male gender bias in rural Low Fee Private (LFP) school enrolments. Chugh (2014) observes that parents' desire to educate their children is expressed in the expenditure incurred on their education against several odds. Harma (2009) argues that rise in the number of private schools leads to ghettoisation of government schools based on socio-economic status and gender.

STUDENT ENROLMENT PATTERNS IN TELANGANA SCHOOLS

Telangana is one of the States in the country that has been witnessing a mushrooming of private schools, particularly, English medium private schools. The official publications of the Government of Telangana, such as Statistical Year Book 2015 and Statistical Year Book 2016 reveal that in 2014-15, the number of government schools (including private aided) decreased by 515. On the other hand, the number of private unaided schools increased by 423. The trend continued in a few districts of the State, including Karimnagar, of which Huzurabad is a part.

SIGNIFICANCE OF THE STUDY

Karimnagar district, one of the developed districts in Telangana, is witnessing a mushrooming of private schools and a decline in government schools. So far, most studies carried out in this area are on the functioning, status and problems faced by government and private schools. Some of these studies focus only on urban areas and cities in the country. Hence, the paper tries to address this gap in the existing literature on the functioning of both government and private schools with reference to enrolment.

OBJECTIVES OF THE STUDY

This paper tries to analyse the enrolment of students coming from diverse backgrounds in different types of school — government and private in Telangana. It also tries to evaluate how gender and social background of the students impact their schooling.

METHODOLOGY

On the basis of agricultural and educational development, the researcher identified a small town named Huzurabad in Karimnagar district and conducted an empirical study on parents' choice of schools. Based on the medium of instruction, the researcher identified a total of 16 government and 25 private schools in Huzurabad. The enrolment details of the students for the academic year 2014–15 was collected from all schools located in the town. Questionnaire

method was used for gathering the data. Statistical Package for the Social Sciences (SPSS) technique was used for analysing the details collected.

FINDINGS

According to Census 2011, the total population of Huzurabad town is 37,665 with 51 per cent male and 49 per cent female. The literacy rate in the town is 75.71 per cent (male 83.99 and female 67.16 per cent). The enrolment patterns of the students for the academic year 2014–15 in both government and private schools with reference to gender, social category (caste) and medium of instruction are as follows.

Enrolment patterns in all schools

The study finds that around 85 per cent of the students in Huzurabad town are enrolled in private schools, whereas, only 15 per cent study in government schools. It indicates that private schools have a majority of enrolment, which reflects parents' preference for private school education for their wards.

Table 1 shows that around 53 per cent of the enrolled students are boys and 47 per cent girls. The data reveal that there is a difference in the enrolment of boys and girls. The data further reveal that girls' enrolment is more in government schools, whereas, boys are mostly admitted in private ones.

Table 1: Gender-wise enrolment in schools

| Schools | Ger | Total | |
|------------|------------|-------|-------|
| Government | Boys Girls | | |
| | 666 | 847 | 1,513 |
| | 44.1% | 55.9% | 100% |
| Private | 4,628 | 3,795 | 8,423 |
| | 54.9% | 45.1% | 100% |
| Total | 5,294 | 4,642 | 9,936 |
| | 53.3% | 46.7% | 100% |

Table 2: Medium-wise enrolment in schools

| Management | ı | Total | | |
|------------|--------|-------|---------|-------|
| | Telugu | Urdu | English | |
| Government | 1,068 | 122 | 323 | 1,513 |
| | 70.5% | 8.0% | 21.3% | 100% |
| Private | 1,067 | 0 | 7,356 | 8,423 |
| | 12.6% | 0% | 87.3% | 100% |
| Total | 2,135 | 122 | 7,679 | 9,936 |
| | 21.4% | 1.2% | 77.2% | 100% |

Table 2 shows that around 77 per cent of the enrolled students study in English medium schools, whereas, only 21.4 per cent study in Telugu medium schools. Only around 1 per cent of the students are enrolled in Urdu medium schools. The data reveal that English medium school education is increasing compared with Telugu and Urdu mediums.

Regarding government schools, the data suggest that most students are enrolled in Telugu medium schools, followed by English medium. Around 8 per cent of the students are enrolled in Urdu medium schools. However, in private setups, 87.3 per cent children have been enrolled in English medium schools, whereas, the remaining 12.6 per cent study in Telugu medium schools. It needs to be noted here that no private school provides education in Urdu medium. The data indicate that private schools have more students studying in the English medium, whereas, government schools have more students in the Telugu medium.

Table 3 shows that majority of the students (65 per cent) enrolled in all schools of Huzurabad town belong to the BC category. Students belonging to the BC category are also more in government and private schools. The data further reveal that the enrolment of BC students in both government and private schools is followed by those belonging to the general category.

Table 4 shows that among the enrolled children in all government

Table 3: Social category-wise enrolment in schools

| 3 • | | | | | | | |
|------------|-------------------|------------------------|-------------------------|-------------------------|-------|--|--|
| | | | | | | | |
| Management | General | Backward Class (BC) | Scheduled Caste (SC) | Scheduled Tribe (ST) | Total | | |
| Government | Government 85 902 | | 492 | 34 | 1,513 | | |
| | 5.6% | 59.6% | 32.5% | 2.2% | 100% | | |
| Private | 1,724 | 5,560 | 1021 | 118 | 8,423 | | |
| | 20.4% | 66.1% | 12.1% | 1.4% | 100% | | |
| Total | 1,809 | 6,462 | 1,513 | 152 | 9,936 | | |
| | 18.2% | 65.0% | 15.2% | 1.5% | 100% | | |

Table 4: Gender-wise enrolment in schools as per social category

| Monogomont | Government | | Priv | Total | |
|------------|------------|-------|-------|-------|-------|
| Management | Boys | Girls | Boys | Girls | Total |
| General | 33 | 52 | 892 | 832 | 1,809 |
| General | 1.8% | 2.8% | 49.3% | 46.1% | 100% |
| ВС | 402 | 500 | 3,085 | 2,475 | 6,462 |
| БС | 6.2% | 7.7% | 47.7% | 38.3% | 100% |
| SC | 218 | 274 | 580 | 441 | 1,513 |
| SC | 14.4% | 18.1% | 38.3% | 29.1% | 100% |
| ST | 13 | 21 | 71 | 47 | 152 |
| | 8.5% | 13.8% | 46.7% | 30.9% | 100% |
| Total | 666 | 847 | 4,628 | 3,795 | 9,936 |
| Total | 6.7% | 8.5% | 46.5% | 38.1% | 100% |

schools, girls are more than boys irrespective of the social category. It indicates that parents are choosing government schools for educating their daughters across social categories.

Within private schools, the enrolment of boys is more than girls across social categories. The data indicate that parents discriminate against their daughters by sending them to government schools. It is further found that most parents prefer private schools for their wards irrespective of the social category they come from.

Enrolment patterns in all government schools

At the time the field survey was conducted, 11 Telugu, three Urdu and two English medium schools were under the management of the government. The study finds that the enrolment of girls (55 per cent) is more than boys (45 per cent) in government

Telugu medium schools. In government Urdu medium schools, significant gap is observed in the enrolment of girls (81 per cent) and boys (19 per cent). In government English medium schools, the enrolment of boys and girls is almost equal. It indicates that gender discrimination exists in the enrolment of students in government Telugu and Urdu medium schools.

Table 5 shows that the enrolment of girls is more than boys in government Telugu medium schools irrespective of the social category. Government Urdu medium schools have students from BC and general categories, and the number of girls is more than boys. Government English medium schools have more girls than boys across all social categories, except BCs. The data indicate that more number of girls is enrolled in government Telugu and Urdu medium schools against boys, while the number of boys is slightly more in government English medium schools than girls. In other

Table 5: Social category and gender-wise enrolment in government schools

| Social | Telugu medium | | Urdu medium | | English medium | | /D - 4 - 1 |
|----------|---------------|-------|-------------|-------|----------------|-------|------------|
| Category | Boys | Girls | Boys | Girls | Boys | Girls | Total |
| General | 23 | 36 | 1 | 4 | 9 | 12 | 85 |
| General | 27% | 42% | 1% | 4.7% | 10.5% | 14.1% | 100% |
| DC | 269 | 313 | 22 | 95 | 111 | 92 | 902 |
| BC | 29.8% | 34.7% | 2.43% | 10.5% | 12.3% | 10.1% | 100% |
| SC | 177 | 222 | 0 | 0 | 41 | 52 | 492 |
| SC | 35.9% | 45.1% | 0 | 0 | 8.3% | 10.5% | 100% |
| ST | 10 | 18 | 0 | 0 | 3 | 3 | 34 |
| 51 | 29.4% | 52.9% | 0 | 0 | 8.8% | 8.8% | 100% |
| Total | 479 | 589 | 23 | 99 | 164 | 159 | 1,513 |
| | 31.6% | 38.9% | 1.5% | 6.5% | 10.8% | 10.5% | 100% |

words, in government schools, girls' enrolment is more than boys in all mediums across social categories.

Enrolment Patterns in all private schools

At the time the survey was conducted, seven Telugu and 18 English medium schools were functioning under private management. It was found that the enrolment of boys and girls was almost the same in private Telugu medium schools, whereas, more boys were enrolled in private English medium schools than girls. This indicates that in private schools, parents preferred English medium for sons.

Table 6 shows that private Telugu medium schools have more girls than boys among general and BC categories, whereas, more boys study in such schools in SC and ST categories. However, private English medium schools have more enrolment of boys than girls irrespective of the

social category. The data indicate that the number of boys is more in private English medium schools across social categories.

Conclusion

The study finds that gender discrimination exists among all communities as regards to the selection of schools. Girls are being sent to government schools, whereas, boys to private schools. Private schools have more students in English medium, while government schools have more in Telugu medium. Government schools have more students from BC and SC categories. On the contrary, private schools have more students from BC and general categories.

The study also observes that 11 Telugu, three Urdu and two English medium schools are functioning in the area under government management, whereas, seven Telugu and 18 English medium

Table 6: Social category and gender-wise enrolment in all private schools

| Social | Telugu l | Medium | English | Total | |
|----------|-----------|--------|---------|-------|---------------------------------------|
| Category | Boys | Girls | Boys | Girls | Total |
| General | 65 | 73 | 827 | 759 | 1,724 |
| General | 3.7% | 4.2% | 47.9% | 44.0% | 100% |
| ВС | 387 | 408 | 2,698 | 2,067 | 5,560 |
| БС | 6.9% | 7.3% | 48.5% | 37.1% | 100% |
| SC | 61 | 56 | 519 | 385 | 1021 |
| SC | 5.9% 5.49 | 5.4% | 50.8% | 37.7% | 100% |
| ST | 13 | 4 | 58 | 43 | 118 |
| 51 | 11.0% | 3.3% | 49.1% | 36.4% | 100% 5,560 100% 1021 100% |
| Total | 526 | 541 | 4,102 | 3,254 | 8,423 |
| | 6.2% | 6.4% | 48.6% | 38.6% | 100% |

schools are functioning under private management. Enrolment of boys is more in private English medium schools across social categories.

The study finds that private schools are attracting more students than government schools. According to Bourdieu (1986), 'cultural capital' of the family is crucial in the selection of a school. The enrolment of children from weaker sections of the society including girls, is more in government Telugu and Urdu medium schools. The proportion of enrolment of children belonging to the general

category is more in private English medium schools. The study concludes that English medium under private management is dominating in Huzurabad.

Appropriate steps need to be taken to increase enrolment in government Telugu and Urdu medium schools and also private Telugu medium schools. The government should also conduct awareness drives to eradicate gender bias in school selection. A 'common school' system may also be thought of, where students from different backgrounds can learn together.

REFERENCES

- Bourdieu, P. 1986. Forms of Capital. In J. Richardson (Ed.). *Handbook of Theory and Research for the Sociology of Education*. Greenwood. New York, USA.
- Census of India. 2011. District Census Handbook: Karimnagar Part XII-B, pp. 44-45
- Chugh, Sunita. 2014. Schooling of Children Living in Slum Areas An Analysis of Selected Households from Hyderabad and Ludhiana. *Indian Educational Review*. NCERT. New Delhi, India. Vol. 52. No. 2, pp. 31–52.
- GOYAL, SANGEETA AND PRIYANKA PANDEY. 2012. How do Government and Private Schools Differ? *Economic and Political Weekly*. Vol. XLVII. No. 22, pp. 67–76.
- Gundemeda, Nagaraju. 2014a. Vulnerability and Education A Study of the Patterns of Discrimination in Government Schools in Andhra Pradesh. *Social Action*. Vol. 64, pp. 48–62.
- ———. 2014. Education and Hegemony Social Construction of Knowledge in India in the Era of Globalisation. Cambridge Scholars. India.
- HARMA, JOANNA. 2009. Can Choice Promote Education for All? Evidence from Growth in Private Primary Schooling in India. *Compare*. Vol. 39. No.2, pp. 151–165.
- HILL, ELIZABETH, ET AL. 2011. Expanding the School Market in India Parental Choice and Reproduction of Social Inequality. *Economic and Political Weekly*. Vol. 46. No. 35, pp. 98–105.
- Joshi, Shruti. 2008. Private Budget Schools in Hyderabad City, India. Gray Matters Capital. Atlanta, USA.
- Nambissan, Geetha. 13 October 2012. Private Schools for the Poor: Business as Usual? *Economic and Political Weekly.* Vol. XLVII. No.41, pp. 51–58.

- Sarangapani, Padma. M and Christopher Winch. 2010. In Tooley, Dixon and Gomathi on Private Education in Hyderabad A Reply. Oxford Review of Education. Vol. 36, No. 4, pp. 499–515.
- Spring, Joel. 2008. Research on Globalization and Education. *Review of Educational Research*. Vol. 78. No. 2, pp. 330–363.
- Sunny, Yemuna. 2011. The Teacher, Society and Modern School. *Economic and Political Weekly*. Vol. XLVI. No. 17, pp. 26–31

Teacher Identity Formation in the Indian Education Context

Ujjwal Banerjee*

Abstract

The Right to Education (RTE) Act, 2009, came up with a significant clause of 'No Detention Policy'. This was one of the most seminal clauses as it seemed to pose a challenge as to whether it is possible for children to learn even if there is no fear of failure in formal exams. Even almost after eight years the law came into effect, ensuring quality learning outcomes remains an enigma. Across the States, teacher unions have been blaming the clause for being the key reason behind the poor performance of students. The struggle to ensure quality teaching is resulting in new ideas being tried out by the education departments of different States. The discourse of change in schooling has a direct bearing on teaching practices in classrooms. This could be in the form of introduction of new textbooks, digital content and vocational education. Prior to becoming a teacher, a person's identity is influenced by one's own sociocultural upbringing. Once the individual becomes a teacher, the person extends one's sense of self within the larger context into the classroom, influenced by one's own location within the school culture and the experiences of functioning within the larger bureaucratic machinery. This paper aims to explore how the current interventions to reform education influence the identity of a teacher.

Indian Education Scenario

The Indian elementary education is witnessing tremendous changes. The Right of Children to Free and Compulsory Education Act came into force in the year 2009. There is a need to reflect on some of the significant changes introduced in elementary schooling, which have implications for teachers. Some of the major changes observed after the Right To Education

^{*} Area Manager for Education, Gujarat Tata Trusts, Mumbai, Maharashtra.

(RTE) Act, 2009 came into force include introduction of a system of assessing students called 'Continuous and Comprehensive Evaluation' (CCE). Besides, the Central Teacher Eligibility Test (CTET) was introduced in the year 2011 with the objective of doing a more thorough evaluation of teachers before they became eligible to join schools. The duration of B.Ed programme, which was one-year since Independence, was increased to two years and in 2014.

A closer analysis reveals that these changes aim at preparing teachers, their appointment mechanism, and efforts at regulating the way they teach and assess students.

Along with efforts as regards to introducing changes at the macro level, efforts have been made at evaluating the learning levels of students since 2005. Besides, it was that year the National Council of Educational Research and Training (NCERT) initiated the process of National Assessment Survey.

Other than the changes being introduced by the Centre, governments various States and Union Territories have also been coming up with various initiatives in order to improve the learning standards of the students, for example, the annual assessment exercise called Gunotsav by the Gujarat education department. Likewise, the Gujarat government has introduced NCERT textbooks in government schools for select subjects as part of its State board curriculum.

NATURE OF WORK FOR TEACHERS

Teachers not only bring content knowledge to classrooms but also present their entire personality before children. This is so because a teacher is not only required to possess content knowledge relevant to students of a particular age group with whom one is engaging but is also expected to relate to children from diverse backgrounds, different capacities and orientations of mind. There is a strong moral dimension to teaching (Hansen, 1999).

Teaching entails looking at a variety of situations on a day-to-day basis, for example, some students would participate in classroom activities, while some would not; some would display a behaviour that may warrant teachers' intervention. Teachers may modify strategies to factor in varied pace of learning of the students.

However, response to all these conditions cannot be precisely determined by theoretical concepts only. How a teacher responds to such situations depends on factors like attitude towards students, the level of liberty given to teachers in the school culture, moral compass of the teacher, etc.

In order to relate to the subjects and students, the teacher needs to understand one's students. This can happen only when the teacher has an understanding of one's own self. It is only through self-reflection that one develops an understanding of the world around.

TEACHERS' IDENTITY

In this paper, the identity of a teacher is being examined in connotation with an individual's sense of self. The identity of an individual plays out in multiple ways. Identity is a shifting construct, something which evolves with time.

Identity formation has normative, contextual and relational dimensions. In the context of a teacher as an individual, normative forces include the voice of the textbook, school rules, government circulars replacing the voice of teachers as they strive to assert a certain homogenising control over the education process.

Schools exist within a larger social setup, which may also influence the teacher's identity. A teacher, who teaches students coming from families, where parents have received formal education, has to meet parents' expectations. Students from these schools also get more support at home, and hence, perform better in academics. Several schools also send their teachers to capacity building programmes and give them opportunities for growth, which boosts their confidence.

In low-cost private schools, teachers, generally, get a paltry salary. In the absence of capacity building opportunities, many teachers have a low sense of self-worth. Context also plays a crucial role in a school. If the teacher is expected to follow a given curriculum and not include one's own perspectives, the person's sense of agency can get greatly

limited. Thus, even within a given category of schools, there can be significant variables that can have strong influence on the teacher's own identity.

Identity is developed through four types of identity, viz., natural, institutional (also called I-identity), discursive and affinity (Gee, 2011). It a relational phenomenon.

Natural identity emerges at the birth of an individual, on which the person has almost no control. I-identity or institutional identity is the one shaped by the institution to which the person belongs. Here, laws, rules and principles govern the day-to-day functioning and tend to provide a certain kind of social standing to the individual within the institution. Discursive identity means the individual essentially sees one self in the light of others' perspective. In affinity identity, the identity of the person develops in close association with a group, working towards a short- or long-term objective or a common cause.

Institutional setting plays a crucial role in shaping the identity of the teacher. According to post–structuralists, such as Foucoult, the power structure within which the teacher operates has a significant role in shaping the sense of self.

The teacher's beliefs that develop over the years and one's sociocultural influences go a long way in determining how one relates to children. Pajarus (1992) notes that belief systems, by their very nature,

are inflexible and may not require an internal consistency. Knowledge is open to evaluation systems, while beliefs do not warrant that. Beliefs do not get altered by argument or reason and play a critical role in organising an individual's response to a problem against the knowledge that the individual may possess.

Yeung (2014) cites that teachers, who believe in entity theory, would have a different expectation from students against those who believe incremental theory. In the in former case, teachers may end up labeling students at a subconscious level, resulting in ignoring their development. Teachers, who come with an orientation to incremental theory, would accept their students as continual learners, who need to be taught in a certain way so that they could learn better.

Likewise. with teachers а approach, teacher-centric where one has to continually transmit information to students. would limited expectations have from them against teachers who have a child-centric outlook. Teaching based on constructivist theory would allow students the opportunity to construct their own knowledge under teacher's guidance.

Batra (2005) points out the fallacy in expecting students to develop competencies, such as critical thinking, which the National Curriculum Framework (NCF)–2005 stresses on, without giving adequate attention to teacher preparation.

The fundamental question is that if teachers are not given the opportunity to exercise independent thinking, then how are they expected to develop this quality among students.

Batra further questions the central assumption that "teacher-trainees will be able to set aside their own social and cultural beliefs and assumptions about knowledge, the process of learning and their view of learners, once they enter the hallowed portals of teacher education".

Hargreaves (2001) explores the importance of emotions in the lives of teachers. These emotions arise within the context of relationships with children, parents and colleagues at school. Teachers' emotions, on account of their sociocultural upbringing, can immensely influence the way thev understand their students. The expectations that teachers have from the students also get significantly impacted on account of difference between their sociocultural backgrounds. In government schools, teachers mostly attribute children's weak learning outcomes to their family backgrounds and that parents do not pay adequate attention to their studies.

Different professions imply different perspectives on emotions. In medicine, doctors are expected to maintain a psychological distance from patients. In case of teaching, the profession involves both cognitive engagement, as well as, emotional connect with students, parents and fellow teachers.

PERSPECTIVES OF TEACHERS' IDENTITY

Teaching, as a profession, has received homilies from various quarters. On one hand, teachers have been extolled through adages like 'builder of the nation', 'responsible for shaping of lives', etc., while on the other hand, the way the society looks at them contributes greatly towards their sense of self.

Sriprakash (2011) mentions about Bernstein's theory of re-contextualisation in the sense that teachers tend to recontextualise pedagogic discourses within their own contexts of work and the kind of sociocultural experiences they go through. Re-contextualisation is perceived as based on the sense of self of the teachers.

Out of the spirit of sacrifice or for nation building, many in India tend to join the teaching profession because of the job security it guarantees and to meet the economic needs of their families.

SCHOOL ADMINISTRATION AND TEACHERS

The significance of identity for teachers has to be seen in conjunction with the nature of profession, for it impacts the way one conducts oneself in class and the teaching-learning process.

The normative discourse on teaching, both at the school and larger structural level, tends to reduce teacher identity to the roles and functions performed by the person. This, in a way, negates the essential difference that exists among individuals — their upbringing, ideological positions and beliefs on notions of learning, etc. As Britzman (1993) observes the role can be assigned from outside, while identity is created through social negotiation.

Administrative reforms initiated to improve the quality of education need to be juxtaposed against the central role that identity formation plays in teacher development.

The response of many teachers to trainings, which do not factor in their classroom experiences, is tepid as their own agency or experiences seem to matter little. They internalise things they find relevant and reject inputs that seem to be at a tangent to what they experience in the classrooms.

Sometimes, experienced teachers slightly supercilious express attitude towards new interventions in the name of over-arching school reforms. This affects relatively new teachers, many of whom want to exercise their own agency as master trainers but are not received well by more experienced trainers. In States like Gujarat, block level trainings for transacting NCERT textbooks (which were introduced in 2018) were done by teachers, who volunteered become master trainers. Many new trainers (teachers) cited instances of how some experienced teachers did not welcome and receive their inputs.

The life of teachers in government schools in India is different from those in private schools. They are considered the last rung of the bureaucratic structure. **Teachers** have to fulfil a number of duties that go beyond academic roles. These duties include participating in recording the Census data, election duties, etc. But a teacher's voice is rarely given importance while deciding curricular content or designing training programmes meant them. Departmental inefficiency can also de-motivate teachers when they are not provided with devices like computers or provided with defunct ones. In certain States, there are cases of how textbooks reach several late after the academic months session has already started, thereby, bringing down the morale of both the teachers, as well as, students. These emotions run deep in their psyche, adversely affecting the way they visualise their role and agency.

The system expects teachers to cover the syllabus in a stipulated timeframe, focus on students struggling at the upper primary stage and come to terms with new textbooks introduced by the State board.

TEACHERS' PROFESSIONAL DEVELOPMENT

In the Indian context, teaching, unfortunately, is not one of the most sought-after professions. Some of the sought-after professions include medicine, engineering, law and commerce as they are directly linked with economic security and social standing.

As a result, people who choose to become teachers may not be sure of what they are actually getting into. Thus, the pre-service teacher education programme, to a large extent, has to shoulder the responsibility of developing teachers' perspective on self-reflection.

In a profession as challenging as teaching, self-reflection is necessary. As with most individuals, teachers, too, may have formed assumptions about learning, education, language and other issues. These assumptions often remain tacit, and are sometimes so ingrained that they remain unexamined (Nikalje, 2016).

The normative structure in teacher preparation can pose immense challenge for teachers, particularly, during their apprenticeship stage, where what they are expected to learn is predetermined.

For an in-service teacher, the supervisor needs to be aware of how the person sees oneself in the role— ability to understand students coming from diverse backgrounds, their relationship with parents, school norms, epistemic notions regarding discipline and the teacher's own professional confidence.

Once teachers develop their own set of criteria or standards of evaluating their success in classrooms, they would be in a position to respond to the role of a teacher's agency in the classroom process. It is inappropriate to expect any kind of intervention to regulate how a classroom session actually flows through.

Conclusion

Studies show how identity gets constructed within a sociocultural and historical context, and is under constant development. There is a difference between teaching and being a teacher — in other words, being conscious of one's space in education discourse and action. The teacher's background and professional experience accumulated over the years influence the way the person approaches students coming from diverse backgrounds of the society. Sometimes, perhaps unknowingly, a teacher may develop a sense of complacency, or slight cynicism in the system, or biases — all aspects that can influence the teaching-learning experience.

It is in the pre-service phase that there is maximum opportunity to help teachers come to terms with their own beliefs, notions and values. and reflect upon them. This needs to be done within a larger framework of aims of education towards which the teachers are being prepared. It calls upon a suitable mix of theory and practice, where teachers reflect on their relationships with students, classroom teaching and the institution thev serving. are Developing the sense of self in a teacher can serve as crucial guiding light to bring about a change in the teaching-learning process.

REFERENCES

- Batra, P. 2005. 'Voice and Agency of Teachers— Missing link in National Curriculum Framework 2005'. *Economic and Political Weekly*. Mumbai. India.
- Brizman, D. 1993. 'The Terrible Problem of knowing Thyself: Toward a Post–structural Account of Teacher Identity'. *Journal of Curriculum Theorizing*. Vol. 24. No. 1.
- Hansen, D. 1999. 'Understanding Students'. *Journal of Curriculum and Supervision*. Association for Supervision and Curriculum Development. Alexandria, USA. Vol. 14. No. 2.
- Hargreaves, A. 2001. 'Emotional Geographies of Teaching'. *Teachers College Record*. Columbia University Press. New York, USA. Vol. 103. No. 6.
- Pajarus, M. 1992. Teachers' Beliefs and Educational Research: Cleaning up a Messy Construct. *Review of Educational Research*.
- Palmer, P. J. 1998. The Courage to Teach: Exploring the Inner Landscape of a Teacher's Life. Jossey-Bass. San Francisco, USA.
- Nikalje, Varada. 2016. Nuggets: Reflections on Language Education. Jadabharat Prakashan. Dharwad, Karnataka, India.

- RODGERS. C and K. Scott. 2008. The Development of Personal Self and Professional Identity in learning to Teach. *Handbook on Teaching*.
- Sriprakash, A. 2011. Being a Teacher in Contexts of Change: Education Reform and Repositioning of Teacher's Work in India. *Contemporary Education Dialogue*.
- Yeung, A., R. Craven and G. Kaur. 2014. Teachers' Self-concept and Valuing of Learning: Relations with Teaching Approaches and Beliefs about Students. *Asia Pacific Journal of Teacher's Education*. Vol. 42. No. 3

Tradition and Modernity — Experiences of Rural Sikh Girls in Ferozepur, Punjab

Tripti Bassi*

Abstract

This paper presents a linkage between tradition and modernity with reference to the Sikh Kanya Mahavidyalaya at Ferozepur, Punjab. The school was established in 1892 in old Ferozepur city as an all-girls' school. It is now a co-ed school till Class VIII and an all-girls' school till the senior secondary stage. Based on ethnographic research, the paper brings together experiences and reflections of girls in this border region of India. It discusses aspects related to gurmat education and the way it propagates religious identities. Education that is transacted inculcates both traditional, as well as, modern values among girls. They either learn to play their traditional roles better or develop skills required for modern professions. Often, tradition and modernity coexist shaping up the identity of girls in varied ways, thereby, enabling them to often resolve inner and outer conflicts with strength and fortitude. The paper aims to highlight the complex interface among the forces of education, religion and gender.

Introduction

Ferozepur city, popularly known as 'shahidon ka shahar' (city of martyrs), is the place where Bhagat Singh, Rajguru and Sukhdev were cremated. It is located in Ferozepur, the largest district in Punjab, occupying 9.58 per cent of the State area. Ferozepur shares its border with Pakistan and is

just 11 km away from the Hussainiwala border. The Sikh Kanya Mahavidyalaya is one of the first girls' schools set up in the district. It started as a middle school and became a high school in 1911 (Sharma, 1983). Initially, a gurdwara school, it expanded to become an acclaimed institution during the late nineteenth and early twentieth centuries.

^{*} Assistant Professor, Department of Elementary Education, Lady Shri Ram College for Women, University of Delhi, New Delhi.

This paper throws an insight into the contemporary milieu of the school and its students. The school is affiliated to the Punjab School Education Board (PSEB). Alongside, the Satnam Sarab Kalyan Trust (SSKT) offers *gurmat* education to the students.

Though modernity and tradition appear contradictory, they are complementary in relation to the experiences of rural Sikh girls in Ferozepur, Punjab.

The Indian society, under influence of social, political and economic forces, encourages imbibing modern practices without renouncing traditional processes. Sometimes, the forces of modernity overtake tradition, whereas, others, traditional practices hold their ground strongly. Amidst this tension, what is observed is the emergence of a space that is created out of the synergy of tradition and modernity. In the book, Modernisation of Indian Tradition, Singh (1973) argues that modernity like tradition is a complex process. What is modern or referred to as modernity or the process of modernisation is a distinct and unique feature of society. Modernisation does not imply rupture from tradition but as Singh states, "it is another novel feature of tradition".

OBJECTIVE OF THE STUDY

The paper aims to explore tradition and modernity continuum with reference to the experiences of rural Sikh girls, who lead a strenuous life as they struggle to gain education, in Ferozepur district of Punjab.

ETHNOGRAPHIC STUDY

Being the ethnography of one school, i.e., Sikh Kanya Mahavidyalaya at Ferozepur, the paper tries to provide a description of the school, pedagogical processes being followed there, and cultural and historical context within which the school is located. Besides, it aims to understand the transmission of values through the process of schooling.

Ethnography is the art and science of describing human groups, its institutions, interpersonal behaviours, material products and beliefs.

number of methods Α to collectively used understand the school context and classroom processes. The researcher conducted non-participant observation the classrooms to understand the socialisation processes of girls and boys, examining the values being imparted to them not only within the four walls of the classrooms but also through extracurricular activities. and cultural and social expectations vis-à-vis girls boys. teachers, alumnae and parents of the students studying in the school were interviewed to gather their perceptions as regards to the socialisation of Sikh girls and boys.

TRADITION AND MODERNITY

In the context of gender studies, a connection between tradition and

modernity becomes all the more poignant. Women and girls are expected to hold on to traditional beliefs despite living in technology-driven changing times. As women seem to be connected to nature and men to culture (Ortner, 1973), tradition seems intrinsically feminine, and modernity, in the garb of providing new dimensions to culture, masculine.

In Ferozepur, traces of tradition can often be seen as most girl students of the Sikh Kanya Mahavidyalaya are engaged in routine household and farm chores. Performing these chores is the topmost priority for the girls as they have been conditioned to do these works from an early age. Hence, performing these household chores is constitutive of their identity. Most girls across social and economic backgrounds are burdened with domestic works. A majority of the girls surveyed shared that they started working in the fields and home from an early age, and squeezed studies in the remaining time, negotiating their educational aspirations in the patriarchal setup.

What appears in a microcosm also can be suggestive of the larger reality. Modern ideas often face intense resistance from traditionalists. Likewise, modern education when introduced for girls here found slow acceptance as many believed that it would not be of much use to them as their main duty was to do household chores. In the early nineteenth century, religious education with rudimentary mathematics, vital for

household budgeting, was introduced so that girls could become 'efficient' wives and mothers when they grow up. Secular education and access to disciplines like science and mathematics were introduced much later.

EXPERIENCES FROM THE FIELD

In the context of Ferozepur, Sikh girls mostly live in border villages or working class settlements, where household is at the centre of affairs and school is placed somewhere near the periphery. Drawing from this field study, it is found that for families living here religious beliefs and practices come foremost. Girls coming from these families are nurtured to weave the tapestry of their lives around the household and farm, local gurdwara, and at last, school. Almost all respondents shared how efficiently they managed household chores like lighting the chulha (earthen stove), preparing cow dung cakes, milking the cows, sweeping and mopping the floor (bokardena), cooking, washing clothes, taking care of younger siblings and paying early morning visits to the gurdwara daily.

Gurmat education defines the core values of school in many ways, wherein, education is not expected to question the established traditional norms but reinforce the traditional values in students. Therefore, religion emerges as the master signifier to which all other instrumental orders of the school correspond.

The respondents shared they learnt to ascribe to the identity of a Sikh early in life by memorising religious texts, keeping their hair uncut, and maintaining sabut surat, not resorting to trimming, threading and waxing. Some Sikh girls also wore keshki (small turban like Sikh men). It was observed that amrit chakna or initiation was uncommon among Sikh girls. While families and school taught girls to be religious and well-versed with the Guru Granth Sahib, they also introduced a number of restrictions on them. Some students had gone through the custom of chulha chakna or baptism. In chulha chakna, one's head and eyes are sprayed with holy water.

Tradition promotes learning of religious texts but only to the extent that it does not hinder interests associated with other significant social institutions like marriage. Mostly, girls were not encouraged to go through the process of amrit chakna as it may adversely affect their marriage prospects.

It was observed that *naitik sikhya*, i.e., moral education was an essential component of religious education in the school. Moreover, *gurmat* education, which includes moral education, aimed to ensure that girls adhered to the three main principles of Sikhism, i.e., spread the word of the 10 gurus and *Guru Granth Sahib*, chant the holy name and share food.

However, modernity and its influence on the lives of girls is

noticeable. A growing assertion of identity and personhood has introduced girls to new spheres of rationality and freedom. It was found that most of the girls surveyed were aware of the Sikh precepts and keen to follow the same, whereas, there were some who had a modern outlook and underlined their dislike for some of the orthodox practices they were being taught to follow in the name of religion.

Some Sikh girls in the school were termed 'fashionable' and treated differently as they cut their hair, and did threading and waxing in defiance Sikh principles. These disapproved by the gurmat teacher and other students, who maintained sabut surat. The prevailing social order in this Firozepur school as dictated by religious practices determined how one must maintain one's physical appearance. The study further revealed that the personal choices of students were not encouraged. Peer pressure played a significant role in regulating student behaviour and most resisted deviating from the propounded religious practices.

Conclusion

Religious doctrines with their propaganda mould young minds to the extent that they are unable to think differently, and even if they do, fear overtakes them and acts as a hurdle in their path to emancipation. The girl students were expected to gain education, including that of religious texts, and maintain a traditional outlook and appearance. However, they must not be taught to detest their peers who have a different outlook towards life, including physical appearance and aspirations to put education above everything else. They should be able to embrace modernity without being reprimanded and discouraged by family and school.

REFERENCES

- Bernstein, Basil. 1975. 'Towards a Theory of Educational Transmissions'. Class, Codes and Control. Routledge and Kegan Paul. London, UK. Vol. 3.
- GOVERNMENT OF PUNJAB. 2004. Human Development Report: Punjab. New Concept Information System Private Limited. New Delhi, India.
- ORTNER, SHERRY B. 1973. 'Is Female to Male as Nature is to Culture?' In M. Z. Rosaldo and L. Lamphere (Eds.). *Women, Culture and Society*. Stanford University Press. California, USA, pp. 68–87
- Sharma, B. R. 1983. *Punjab District Gazetteers, Firozepur*. Revenue Department Punjab, Chandigarh, India.

School Education — The Way Forward

Ruchi Shukla*

Abstract

This paper tries to ascertain if the Self-determination Theory and its concepts of competency, autonomy and relatedness, which lead to intrinsic motivation, can be utilised in solving the rising problem of stress among students, including those at the primary stage. Apart from theoretical interventions and approaches, one practical way of handling not just stress but related problems as well is by having trained teachers as 'level one counsellors'. It is a teacher who serves as link among students, parents, school education system and administration. The presence of such a person in a school, whom students can reach out to, would not only ensure better stress management in them but also help build resilience and intrinsic motivation, enabling them become independent learners, who are self-driven and determined despite the challenges they face in life.

Introduction

Learning for an end — which refers to the annual exam results and securing social status by acquiring a job thereafter — seems to be a common understanding of the education process among most parents and other stakeholders. It seems that the school education system does not emphasise 'intrinsic motivation' for learning as opposed to extrinsic motivation. Academic efforts and extrinsic factors to sustain learning have multiplied stress levels among students, adversely affecting their mental, physical and psychological health.

Educational stress has led to a rise in the number of suicide cases and anxiety issues among students. The situation is alarming and has drawn the attention of

^{*} Assistant Professor, Department of Educational Psychology and Foundations of Education, NCERT, New Delhi.

educationists, psychologists and worldwide. counsellors including India. The education system in India accommodate students to coming from diverse backgrounds of society. Curriculum overload makes them study a number of subjects that too for longer hours, adversely affecting their retention capacity, and gradually, their mental and physical health.

Moreover, parents' expectations from their wards to excel in extracurricular activities, apart from pursuing some hobbies, have also increased (Shukla, 2004). This pressure is overwhelming for a student to handle. At times, the student may not be able to share one's feelings with anyone, which may add to their stress and anxiety.

Adolescent students are more prone to educational stress, which starts from struggling to know themselves as individuals, along with handling academic pressures like performance in examinations, making a career choice, and meeting the expectations of parents, teachers and school. This stress among adolescents is reflected in the increasing number of suicide and other related cases like depression, anxiety, etc.

Though there are theoretical approaches to problems faced by children and adolescents, few actually look at school and parental pressure, and the resultant stress. One such framework for understanding the dynamics of educational stress is the Self-Determination Theory proposed

by Deci and Ryan (1985). The theory seeks to explain the conditions under which individuals internalise external contingencies. With the movement of the states of motivation towards intrinsic or internalised motivation. students are enabled to assume greater self-control over their efforts and outcomes. The theory suggests that with the satisfaction of the three needs of autonomy. competence and relatedness, an individual can experience well-being (Deci Ryan, 2000). Such well-being when sustained over a lifetime leads to a sense of personal integrity and satisfaction or 'eudaimonia' (Ryan and Frederick, 1997; Waterman, 1993).

Several factors in the Indian education context add to students' curricular and co-curricular burden. One of them is public and private schooling, which are different not only in syllabus and teaching practices but also in the socio-economic backgrounds of the students studying in the schools. Gender, too, adds stress levels among students. Therefore, all these and other related factors need to be analysed so as understand the dynamics education stress among students.

Students at the primary stage have to adjust to a new environment outside home, i.e., school. Here, teachers serve as an important link helping the students connect with the system. Therefore, this study aims to understand the complexities of stress among students, including those at the primary stage.

However, this stress is mostly observed in students of Classes X-XII. It is at this stage that they are not only pressured to perform well in exams from home and school but also realise that the marks scored in Classes X and XII board exams are important for their career. Uncertainty related to career choices leads to stress, anxiety, depression, and other mental and physical health ailments in them. The high stress levels may affect their efficacy, academic performance and well-being. However, it is to be noted that these behavioural symptoms sometimes start in many students right at the primary stage, which may go unnoticed or are ignored by parents and teachers at that time.

Self-determination Theory—An Analysis

According to the Self-determination Theory, low relatedness is a major factor for lack of intrinsic motivation among students. Moreover, the education system does not allow much scope for autonomous self-determined learning. Further, external control seems to dominate the schooling and educational experience of the students. Other factors affecting the sense of autonomy are — authoritarian system, structured teaching, one-way teaching style (which hardly has scope for interaction or discussion with students), etc. Competence is affected by lack of positive feedback, snowball effects of poor performance and consequent increase

in negative feedback, achievement related anxiety, etc. According to the Self-Determination Theory, autonomy and competence have significant influence on students' interest and intrinsic motivation in the learning process. These three factors, i.e., autonomy, competence and relatedness, are crucial for learning and facilitate or impair the degree of internalisation of external motivating conditions.

According to Bandura (1977), efficacy belief and the concept of competence in the Self-Determination are related in meaning and experience as they refer to an individual's sense of self-worth that contributes to one's motivation. Efficacy has a strong relation to performance and competence belief. This correlation is more prominent in adolescents than children. The hypothesised relationship between self-efficacy and academic motivation has been proved by researchers (Lent, Brown, and Larkin, 1986). A study of different content domains (writing and reading) shows that is significant relationship between self-efficacy and academic motivation (Lent, Brown, and Larkin, 1986; Multon, Brown and Lent, 1991; Pajares, 1996; and Schunk, 1995). Therefore, it can be said that efficacy belief is central to students' goal setting and efforts they put in to achieve their targets. Students with a strong sense of efficacy belief will make persistent efforts to achieve their goals and experience lower stress levels than those with a lower sense of efficacy. The latter type of students may slacken in their efforts and feel anxious or stressed out due to lack of self-confidence.

Self-esteem and efficacy belief are closely related as they emphasise perceived competence in the Self-Determination Theory. Different people have different speed of internalisation of environmental characteristics, usually, referred to as the rate of adjustment.

Research studies indicate that stress affects the process of self-determination or the ability to control one's thoughts, perceptions orientation (Salkovskis Harrison, 1984). Kant and Gibbsons (1987) point out: "It is not the sheer frequency of disturbing thoughts, but the perceived inability to turn them off, that is a major cause of distress". emphasises This view a major factor in causation and outcome of stress. If people are intrinsically motivated, they have the strength to overcome external difficulties that the environment may pose before them. Besides, the coping process is much smoother in this case. The stronger a person's sense of efficacy, the bolder is the way of tackling problems that breeds stress and anxiety, and greater is one's success in shaping the environment to one's liking (Bandura, 1997; Williams, 1992).

Two decades of research on factors of intrinsic motivation and educational performance suggests that autonomy motivated students thrive in education and they benefit when teachers support this autonomy (Reeve, 2002). This sense of autonomy is related to competence and relatedness. Therefore, all three factors are important determinants of a student's sense of self-control and intrinsic motivation.

THE INDIAN SCENARIO

Schools in India are diverse in nature - varying widely across context and locations like urban and rural, catering to students belonging to different socio-economic backgrounds, and following varied norms and standards. The socio-economic difference in the status and background of the students studying in government and private schools influences their educational achievement. The ecology of the students brought up in conditions of poverty is characterised by inadequate physical facilities, stimulation and models (Sinha, 1982; and Vagrecha and Bapna, 1993). Research studies, further, indicate that lack of basic facilities like food, hygiene, health and education not only adversely affects the health of these students but also their cognitive development.

Saraswathi and Dutta (1990), in their study, share the strengths and weaknesses of poverty conditions. They point out that weaknesses are characterised by limited scope for social mobility, while strengths are typified as availability of informal support system, family atmosphere, and realistic and practical orientation to life.

In India, students belonging to different socio-economic backgrounds and school types are subjected to parents' and teachers' expectations regarding their performance exams, which are apparently related to their levels of intrinsic motivation. Government schools provide subsidised education and greater accessibility — both geographically and economically. While government school students mostly come from families, where there may be little intellectual support for studies further aggravated by economic disadvantage (no tuitions), those in private schools are likely to get maximum support (either from the institution or family or both). Therefore, the two school types are seen of becoming important factors in determining the educational achievement of the students.

findings Though the are sometimes contradictory, there is a strong indication of general impairment in cognitive functioning due to poverty conditions. Most of the cognitive processes that are affected are relevant to students' academic performance (Sinha, 1990). The effect of this deprivation is not limited to the cognitive functioning of the students but is also reflected in levels of motivation. The disadvantaged mostly have a low and stagnant level of aspiration; display low goal discrepancy index and greater fear of failure, and lack risk taking attitude. They display low need of achievement, autonomy, and also lack

of initiative and aggression. The level of motivation, thus, is low. Hence, it may be said that these students have a low sense of self and self-efficacy (Mohanty and Misra, 2000).

Another important variation between the two groups coming from different Socio Economic Status (SES) is achievement related cognition. Kelley (1971) suggested that attribution is one of the basic cognitive functions. Attribution the cognitive process, whereby, an individual tries to locate causes to one's behaviour and its outcomes. The person tends to attribute the outcomes of one's behaviour or efforts either to internal or external causes. In case of people belonging to poor sections of the society, failure is, generally, viewed as lying inside a person, while success is treated as a resultant of luck (Jain and Misra, 1986). Hence, students coming from lower economic backgrounds not only suffer from negative consequences of the Pygmalion Effect (Rosenthal and Jacobson, 1968) or low expectations but. also from self-defeating cognitions, where a person is unable to perceive oneself as the master of one's life, taking the blame for failures. Thus, students from low SES are less likely to experience autonomy, relatedness and competence in an educational setup, which may lead to lack of or poor intrinsic motivation in them. However, in many cases, such students experience less stress as parental and societal pressure to perform is lesser. Some children from low economic backgrounds show resilience or non-vulnerability, and emerge as 'lotus in the mud' (Mohanty and Misra, 2000).

In India, gender is one of the most important factors that influences the life of a person. Often, girls studying in government schools have to fulfill household responsibilities like cooking, cleaning, taking care of younger siblings and performing other domestic chores that adversely affect their education. However, in private schools, girls come from a small section of the privileged population, where gender discrimination is at its minimal and they, therefore, enjoy family support in pursing their education and ambitions.

Conclusion

The Self-Determination Theory and its concepts of competency, autonomy and relatedness, which lead to intrinsic motivation, can help solve the rising problem of stress among students not just at the secondary but also at the primary stage of schooling. Therefore, building on the students' sense of self — be it identity, self-esteem and efficacy — can offer solution to the rising stress levels among them. If teachers work on a student's sense of relatedness, competency and autonomy, it will make one capable of handling academic, as well as, personal and social problems. Therefore, it is suggested that teachers, especially, at the primary stage, be trained as level one counsellors as the foundations of a child's future are laid at this stage.

REFERENCES

- Bandura, A. 1977. Self-efficacy Toward a unifying theory of behavioral change. *Psychological Review*. Cambridge University Press. Vol. 84, pp. 191–215.
- ——. 1997. Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist.* Vol. 28. No. 2, pp. 117–148.
- Deci, E. L., and R. M. Ryan. 1985. The general causality orientation scale Self-determination in personality. *Journal of Research in Personality*. Vol. 19, pp. 109–134.
- ———. 2000. The 'what' and 'why' of goal pursuits Human needs and self-determination of behaviour. *Psychological Inquiry*. Vol. 11, pp. 227–268.
- Jain, U. and G. Misra. 1986. A study of the causes attributed to corruption in Indian society. *Bombay Psychologist*. Vol. 7, pp. 60–64.
- Kelley, D. H. 1977. How the school and teachers create deviants. *Contemporary Education*. Vol. 48. No. 4.

- Lent, R. W., S. D. Brown and K. C. Larkin. 1986. Self-efficacy in the prediction of academic performance and perceived career options. Journal of Counseling Psychology. Vol. 33. No. 3, pp. 265–269.

 Retrieved from https://doi.org/10.1037/0022-0167.33.3.265.
- Mohanty, A. K. and G. Misra. 2000. *Psychology of Poverty and Disadvantage*. Concept Publishing Company. New Delhi, India.
- Multon, K. D., S. D. Brown and R. W. Lent. 1991. Relation of self-efficacy beliefs to academic outcomes A meta-analytic investigation. *Journal of Counselling Psychology*. Vol. 38. No. 1.
- Pajares, F. 1996. Self-efficacy beliefs in achievement settings. *Review of Educational Research*. Vol. 66, pp. 543–578.
- Reeve, J. 2002. Self-Determination Theory applied to Educational Research. In E.L. Deci and R.M. Ryan (Ed). *Handbook of Self-determination Research*.
- ROSENTHAL, R. AND L. JACOBSON. 1992. Pygmalion in the classroom. Irvington. New York. USA.
- RYAN, R. M. AND C. FREDERICK. 1997. Energy, personality and health Subjective vitality as a dynamic reflection of well-being. *Journal of Personality*. Vol. 65. No. 3, pp. 529–565. Retrieved from https://doi.org/10.1111/j.1467-6494.1997.tb00326.x.
- Salkovskis, P.M. and J. Harrison. 1984. Abnormal and normal obsessions A replication. Behaviour Research and Therapy. Vol. 22. No. 5, pp. 549–552.
- Saraswathi, T. S. and R. Dutta. 1990. Poverty and human development Socialisation of girls among the urban and rural poor. In G. Misra (Ed.). *Applied Social Psychology in India*. Sage Publications. New Delhi, India, pp. 141–170.
- Schunk, D. H. 1995. Self-efficacy and education and instruction. In J. E. Maddux (Ed.). Self-efficacy, *Adaptation and Adjustment Theory, Research and Applications*. Plenum. New York, USA, pp. 281–303.
- Shukla, R. 2004. The Burdened Childhood: A Case Study of Educational Load among Primary School Children in Delhi. Unpublished dissertation work. Zakir Husain Centre for Educational Studies, Jawaharlal Nehru University. New Delhi, India.
- Sinha, D. and G. Mishra. 1982. Deprivation and its Motivational and Personality Correlates. In D. Sinha, R. C. Tripathi and G. Misra (Ed). *Deprivation: Its Social Roots and Psychological Consequences*. Concept Publishing Company. New Delhi, India.
- Vagrecha, Y. S. and G. Bapna. 1993. Visible and not so visible deprivational environment and its psycho-educational implications for children. *Indian Journal of Clinical Psychology*. Vol. 20. No. 1, pp. 11–16.
- Waterman, A. S. 1993. Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology*. Vol. 64. No. 4, pp. 678–691. Retrieved from https://doi.org/10.1037/0022-3514.64.4.678.

Human Body Portrayal in NCERT's EVS and Science Textbooks — An Analysis

Jiss Mary Thomas*

Abstract

Body is the most evident form of differentiating among people. Knowing the human body helps accept people who are different physically. It is vital to see how the physical aspects of a human body are depicted in textbooks. This paper tries to study how inclusive NCERT textbooks are in terms of including the full image of people with special needs. NCERT textbooks on Environmental Science (Classes III-V) and science (Classes VI-X) were analysed with reference to the aims reflected in the Position Paper for Children With Special Needs (CWSN). It was found that NCERT textbooks from Classes III-X are all-inclusive in nature and cover the criterion for CWSN as mentioned in the National Curriculum Framework (NCF)-2005. However, the body is described from a general perspective and differently abled body types, although included, are comparatively neglected as far as images used in the books are concerned. Thus, even though the school space has been made inclusive by welcoming CWSN into the classroom, the study material may make some children feel inferior. The paper observes that a slight rephrasing in language and inclusive examples may make it more relatable and address a wide range of audiences.

INTRODUCTION

Textbooks are an explicit manifestation of the implicit aims and objectives of curriculum being followed in schools. Krishna Kumar, in his article 'Origins of India's Textbook Culture', points out that there are two kinds of school system—one, where the school is free to select its textbooks or make textbooks of its own, and another, where the school uses textbooks prescribed by the concerned authorities. In the first kind of school, the teacher recommends texts from different books and other resource material the students can

^{*} Student, M.ED (II year), Tata Institute of Social Sciences, Mumbai, Maharashtra.

refer to. In India, however, the role of the teacher depends on the type of school (Kumar, 1988). In the second type of school, there is a pressure to complete the syllabus in a limited timeframe (Kumar, 1988). Here, the teacher is bound by the textbook as it is prescribed and not just recommended by the authorities concerned.

Schools in the Indian education system are mostly of the latter kind. There is a bombardment of syllabus, subjects, lessons, assessments, etc.

Freire (1974) raises the question of how the education system is suffering from 'narration sickness', where a teacher is the narrator and students are mere passive listeners, who have to mechanically memorise the narrated content. A typical Indian classroom is governed by textbooks. overriding objective teacher is to complete the syllabus within a stipulated timeframe. At times, the students find it difficult to cope with this huge rush to complete the syllabus. In such a scenario, it is unlikely that anything beyond the textbook will be covered.

Apple and Franklin (2004) in their work, 'Curricular History and Social Control', point out that schools and curricula evolve in such a way that the interests of one community are subsumed by those of a more dominant community. In such scenario, schools can be used to normalise and infiltrate the power pattern of society. Such infiltration happens through the curriculum and hidden curriculum framework.

The contents of each textbook need to be looked into carefully before introducing them in a class.

The NCF-2005 underlines the need for bridging the gap between school and home environment. The only way to achieve this is to make textbooks relevant to students. But with the same textbooks being studied by students across country, a fully inclusive textbook is not possible. However, topics like 'disability' may be included to sensitise the teaching fraternity, students and their parents. For teachers in India, textbooks become their primary source of information. Therefore, it is important to have a closer look at the content of the textbooks.

The NCF-2005 propounds the idea of creating an inclusive classroom environment with emphasis on CWSN (NCERT, 2005). The document notes the difficulties that CWSN encounter because of inappropriate pedagogic practices. It also highlights how 'labeling' can create inferiority complex among CWSN 2005). The Position Paper for CWSN notes that in 1970s, the government had launched a scheme of Integrated Education for Disabled (IEDC). This scheme attempted to integrate special children in regular schools (NCERT, 2006). "Segregation or isolation is good neither learners with disabilities, nor for general learners without disabilities. A rational society desires that learners with special needs be educated along with other learners in inclusive schools, that are affordable and have sound pedagogical practices" (Position Paper on CWSN, NCERT, 2006). Inclusion of CWSN helps in the holistic development of the entire class. All students learn to follow a code of conduct while interacting with each other. They learn tolerance and accept individual differences. The education imparted needs to be relevant to all students, irrespective of the differences. Therefore, textbooks play a crucial role in giving the right direction to education.

The Focus Group Position Paper on Teaching of Science' puts forward a different set of objectives based on the level of education. At the primary stage, the aim is to nurture the curiosity of children and help them explore the world, people and artifacts. At the upper primary stage, there is gradual transition from environmental studies to science. The topics studied need to be relevant drawn from real-life experiences. The Position Paper argues that students at the upper primary stage enter adolescence and there is a need to conduct open discussions on topics, such as human body, reproduction and safe sex. At the secondary stage, concepts of science that require abstract thinking may be introduced (Position Paper on Teaching of Science, NCERT, 2006).

OBJECTIVES OF THE STUDY

 To study how images of people with special needs are represented in EVS and science textbooks • To study the language used in the textbooks as an indicator of inclusion

KEYWORDS

People with Special Needs (PSN)

They are individuals with any kind of physical impairment like visual, hearing or loco motor. Not much attention is paid to intellectual disability.

People with No Impairment (PNI)

They are individuals who have no physical impairment, whether visual, hearing or loco motor.

Comprehensive human body

It means identifying different kinds of human body, and not limiting the human body to a standard anatomy. It includes both PNI and PSN.

Comprehensive human body portrayal

This paper defines comprehensive human body portrayal in terms of the inclusive lens used to include PSN and PNI while portraying the human body through illustrations in chapters related to visual, hearing and loco motor abilities.

METHODOLOGY

The method used for conducting this study is 'content analysis' of NCERT's EVS and science textbooks of Classes III to X. The analysis has been done taking into account the aims of NCERT's Position Paper for CWSN (2006) and comparing it with EVS and science textbooks published by the Council.

Perception of the Human Body in EVS and Science Textbooks

Knowing and appreciating one's body is important. The study aims to analyse the way topics related to the human body are introduced in NCERT textbooks. It also aims to analyse how different body types, especially, those of PSN, are depicted in the textbooks, and how the needs of PSN (especially, adults) are portrayed. Hence, it is important to understand that public perception is created through textbooks, magazines, social media, etc. This makes it imperative to analyse the contents of the human body in science textbooks that are taught to children in schools. human body. This study focuses on the depiction of physical body and information in the textbooks with regard to visual, hearing and loco motor abilities.

ANALYSIS

Discrimination on the basis of differences in the physical body is common. Classroom reflects a mini society. Teachers need to see to it that differences in students' physical build must be used as resources for learning. Such cohesive environment will make them learn and understand the need to accept and respect everyone as equals. While advocating inclusive education, there are many factors that need to

be considered, such as accessible infrastructure, special educator, counsellor and content taught in the classrooms. The students should be able to relate to the content being taught in a classroom.

Progression of content

It is important to understand that the early years of a person are the formative years and play a pivotal role in shaping one's personality. Curiosity is at its peak during childhood. This is obvious when one observes children picking up every little moving object or creature as they explore the world around using the mobility of their bodies. Hence, the exploration of one's body should start early in life. The major themes that run across Classes III to V in EVS textbooks are as follows.

- Family and friends (relationships, work and play, plants and animals, etc.)
- Food
- Shelter
- Travel
- Water
- Things we make and do

Body' as a theme has not been explored much in NCERT's EVS textbooks meant for the primary stage. Topics related to the 'body' are incorporated as sub-themes of family and friends. For example, a Class III textbook tells the story of a blind man and how he reads and manages his daily routine and an exceptional piano player, who cannot hear or

sing. The textbook focuses on some abilities that one possesses and some one lacks.

NCERT's Class IV EVS textbook teaches students about how babies resemble parents.

NCERT's Class V EVS textbook has chapters on breathing and other sense organs a human being is blessed with. The chapters are explained through activities, stories and poems, making learning interesting and comprehensive.

In NCERT's Science textbooks of Classes VI to X, many themes related to the human body are discussed. There are chapters on body movements, respiration, cells, reproduction, life processes and the human eye.

It is, thus, important to note that the 'human body' as a topic has not been explicitly dealt with in NCERT's science textbooks meant for the primary classes, while textbooks

Bowl an imaginary ball at an imaginary wicket. How did you move your arm? Did you rotate it at the shoulder in a circular movement? Did your shoulder also move? Lie down and rotate your leg at the hip. Bend your arm at the elbow and the leg at the knee. Stretch your arm sideways. Bend your arm to touch your shoulder with your fingers. Which part of your arm did you bend? Straighten your arm and try to bend it downwards. Are you able to do it?

of elementary and senior grades have just three or four chapters on the subject.

Presentation of content and language used

The way a chapter is presented, in terms of the content chosen, illustrations used and language employed, plays a vital role in defining its learning outcome. In *Science* textbook of Class VI, a chapter titled 'Body Movements' talks about the different joints in a human body. It also carries activities for the students so that they can explore their own body movements and the different joints involved in making those movements.

One of the activities given in the textbook is illustrated in Figure 1.

Similar examples and activities are given in the chapter for every joint and muscle. As the chapter progresses, no stress is laid on how children with mobility impairment

Bend your fingers. Are you able to bend them at every joint? How many bones does your middle finger have? Feel the back of your palm. It seems to have many bones, isn't it (Fig. 8.8)? Is your wrist flexible? It is made up of several small bones. What will happen if it has only one bone?



Figure 1: Activity on joint movement in NCERT's Science-Class VI textbook (Chapter 8, 'Body Movements')

can become mobile with the help of technology.

The textbooks should raise meaningful and interesting questions. By emphasising applications and problem solving, such topics can be included in the textbooks and present an all-inclusive picture.

In fact, the textbooks of all classes have activities relating to all children. In Class VII *Science* textbook, the chapter on 'Respiration in Organisms' carries illustrations that show people running, walking and skipping. The activities to be performed by the students are also related to these.

The Class X *Science* textbook has a chapter titled 'The Human Eye and Colourful World' (Figure 2), which deals with the structure of the human eye, how vision is formed and vision

corrective measures. The chapter talks about myopia, hypermetropia and presbyopia. However, this will inevitably lead to a classroom discussion on blindness and why some people cannot see.

The chapter also stresses how the able bodied can donate their organs after death. "Do you know that our eyes can live even after our death? By donating our eyes after we die, we can light the life of a blind person." (Science-Class X, NCERT).

However, the words normally used in NCERT textbooks may give a mistaken impression that the textbooks place a PNI on a higher pedestal than a PSN. Words like 'you' and 'our' run across the textbooks. While such words make a personal connect with the readers, it is

Think it over

You talk of wondrous things you see, You say the sun shines bright; I feel him warm, but how can he Or make it day or night?

- C. CIBBER

Do you know that our eyes can live even after our death? By donating our eyes after we die, we can light the life of a blind person.

About 35 million people in the developing world are blind and most of them can be cured. About 4.5 million people with corneal blindness can be cured through corneal transplantation of donated eyes. Out of these 4.5 million, 60% are children below the age of 12. So, if we have got the gift of vision, why not pass it on to somebody who does not have it? What do we have to keep in mind when eyes have to be donated?

Figure 2: NCERT's Science-Class X textbook has a chapter titled 'The Human Eye and Colourful World'.

important to read them in context and understand the presumed audience it is catering to. These words when read in context clearly address a PNI. It is crucial to teach children the differences between different body types so that they develop empathy towards others as they grow up. Thus, it is important to realise the inclusivity of the audience that the books are catering to and try addressing all of them.

Conclusion

Hence, it can be concluded that it is important to redefine the term inclusion, especially, in NCERT textbooks, which cater to lakhs of students across the country. It is not merely getting special children enrolled in school but also giving them an education that they can

relate to. Therefore, representation of PSN in textbooks is crucial not only to make the curriculum relatable but also imbibe sensitivity and empathy in students. However, it may be observed by some that comprehensive portrayal of the human body has had less attention in NCERT's EVS and science textbooks as far as images are concerned. Some of the points that need to be noted are as follows.

- Chapters dealing with the human body are few. Indeed, all perspectives and topics cannot be covered in a chapter or textbook but some rephrasing in language and examples can make it more relatable and address a wide range of audiences.
- Representation of PSN needs to be increased in terms of content and visuals.

REFERENCES

- Apple, M. W. and B. Franklin. 2004. Curricular History and Social Control. *Ideology and Curriculum*. Routledge Falmer. New York, USA. pp. 59–76
- Kumar, K. 1988. 'Origins of India's Textbook Culture'. *Comparative Education Review*. Vol. 32. No. 4, pp. 452–464.
 - Retrieved from http://www.jstor.org/stable/1188251 accessed on pdf.
- NCERT. 2005. *National Curriculum Framework 2005*. NCERT. New Delhi, India. Retrieved from http://www.ncert.nic.in/rightside/links/pdf/framework/english/nf2005. accessed on pdf.
- ——. 2006. Position Paper: National Focus Group on Education of Children with Special Needs. NCERT. New Delhi, India. p. 10.
 - Retrieved from http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/focus_group/special_ed_final1.pdf.

- ——. 2006. Position Paper: National Focus Group on Teaching of Science. Executive Summary, FGPP Teaching of Science. NCERT. New Delhi, p. iii. Retrieved from http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/focus_group/science.pdf.
- ——. 2013. 'Body Movements'. *Science* Textbook for Class VI. NCERT. New Delhi, India.
- ——. 2013. 'Respiration in Organisms'. *Science* Textbook for Class VII. NCERT. New Delhi, India.
- ——— 2013. 'The Human Eye and Colourful World'. *Science* Textbook for Class X. NCERT. New Delhi, India.
 - Retrieved from http://ncert.nic.in/textbook/textbook.htm?jesc1=11-16 accessed on PDF.

Inclusion of Disabled Children in Indian Schools — Status and Need

Garima Tandon*
Sunil Kumar Singh**

Abstract

Each student is unique. Therefore, there must be no discrimination on the ground of class, creed, race, religion, colour, Intelligence Quotient (IQ) or ability, etc. In an educational setup, the term 'inclusion' is used for including and embracing this diversity without discrimination. One aspect of this diversity is 'disability'. This article emphasises the educational status of Children With Special Needs (CWSN) in the Indian context. It deals with the present status of the disabled population, especially children, and various policies and programmes pertaining to their education and provisions for inclusion. The educational status of CWSN has been inferred from the Report of Ministry of Statistics and Programme Implementation (MSPI), titled 'Disabled Persons in India: A Statistical Profile 2016'. The paper analyses that though various programmes and policies have been initiated from time-to-time, literacy rate among the disabled population is alarmingly low. Barriers regarding the inclusion of disabled children, drawn out of various studies, have been also highlighted in the paper. Besides, provisions for the inclusion of disabled children have been discussed. The article points out that meeting diverse needs is a challenge, but at the same time, it is an opportunity to enrich learning and school relations.

Introduction

"Millions and millions of persons have born and have died but no two persons are identical. Billion and billions of persons will be born and will die but no two persons will be identical. Trillions and trillions of leaves will grow and fade away but no two leaves are identical. Nature is perfectly imperfect. Universe is designed to coexist with imperfection and individual differences" (Malhotra, 2002, as quoted in Bhokta, 2012).

^{*}M.Ed. student, Faculty of Education, Banaras Hindu University, Varanasi, Uttar Pradesh.

^{*}Professor, Faculty of Education, Banaras Hindu University, Varanasi, Uttar Pradesh.

These lines reflect that no two persons are exactly similar to each other by nature. Each person differs from the other in one or many aspects. Therefore, there is perfection in imperfection and unity in diversity. Universe can be said to be an inclusive setting of all these diverse things. Inclusion in educational setting is a relatively similar concept.

According to the Academic Dictionary Education (2005),of "Inclusion is a process, whereby, students who are in special education enroll programmes in general education classes." But this definition presents a narrower perspective of inclusion. The broader perspective covers all children across caste. class, gender, culture, socioeconomic status, IQ levels, ability, etc.

The paper tries to study one aspect of this diversity, i.e., 'disability'. Disabled people are regarded as one of the most excluded groups in society. It is due to this exclusion that literacy level among the country's disabled population is alarmingly low. According to the Census 2001, literacy level among the country's disabled population was only 49 per cent. Inclusion is a way to guarantee justice to this group.

According to Barton, et al., (2014), over the last quarter of the twentieth century, the rate of inclusion among the disabled has increased by only around six per cent. It reflects that the situation is more or less the same till now. This paper tries to highlight the present status of the disabled

population, and various policies and initiatives related to their education and provisions for inclusion in the country.

STATUS OF THE DISABLED IN INDIA

According to MSPI's report titled 'Disabled Persons in India: A Statistical Profile 2016', out of 121 crore population, 2.68 crore are disabled (2.21 per cent). The Census 2011 states that among the disabled, 56 per cent are male and 44 per cent female against 51 per cent male and 49 per cent female in the country's total population (Figure 1).

It is observed that there is an increase in the disabled population from 2.13 per cent (Census 2001) to 2.21 per cent as reported in Census 2011 (Figure 2). Therefore, with a rise in disabled population, the number of institutions catering specifically to their needs must also be increased.

From educational point view, it is important to learn about age-wise disabled population. As per this report based on Census 2011, disabled people are found more in the age group of 10-19 years. It is observed that according to Census 2011, there are 46.2 lakh disabled people in the age group (Figure 3). People under this age group are in the stage of school education. According to the Right to Education (RTE) Act 2009, all children in the age group of 06-14 years are entitled to free and compulsory education. However, according to the Convention of the

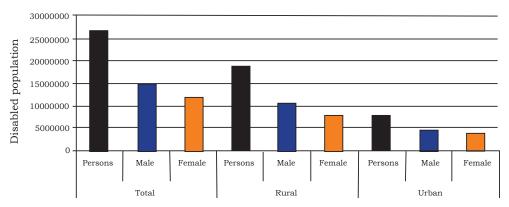


Figure 1: Disabled population in India according to Census 2011

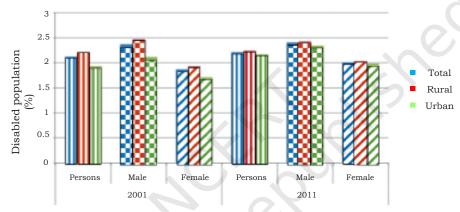


Figure 2: Percentage of disabled population in India — Census 2001 and 2011 Source: Disabled Persons in India: A Statistical Profile 2016

Rights of the Child (CRC), United Nations, 1989, CWSN are entitled to free and compulsory education till they attain the age of 18 years. This implies to India as well as it is a signatory nation to the CRC.

Figure 4 shows that only 61 per cent of the disabled children in the age group of 05–19 years are attending educational institutions and there are 27 per cent who never attended one.

According to the same report, the literacy rate among the disabled population is 55 per cent, of which 62 per cent are male and 45 per cent female (Table 1).

Figure 5 depicts percentage-wise level of education gained by disabled persons. It is observed that a meagre number of the literate disabled population has access to higher education.

From time-to-time, many policies and programmes have been formulated and implemented to ensure the education of disabled people. These initiatives have helped enrich their literacy rate. As part of these initiatives, special schools

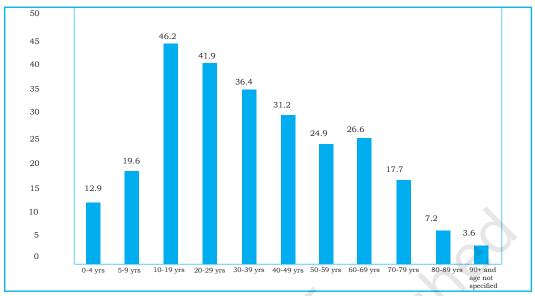


Figure 3: Disabled population in India as per age group (Census 2011)

Source: Disabled Persons in India: A Statistical Profile 2016

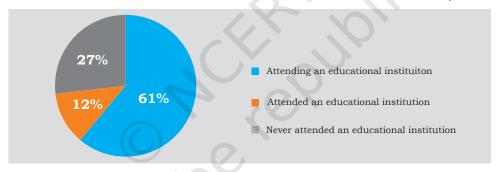


Figure 4: School attendance of disabled children in the age group of 5-19 years in India (in %) according to Census 2011

Source: Disabled Persons in India: A Statistical Profile 2016

were opened for them. Gradually, the concept of inclusion was introduced, which emphasised 'inclusive education' (Table 2).

From Special Education towards Inclusiveness

The 'special education component' refers to a separate system of education

for disabled children to meet their needs. It needs to be noted here that the concept of special education is older than inclusion. According to the report titled 'Target Study' (2018), "During the fifth and fifteenth century, the Church provided care for disabled children but modern methodology of special education was still amiss. From

the mid-fifteenth century, various special education programmes were being formulated and development of special education programme came under action by different physicians and educators. This concept arose in the 1880s in India" (Sidhu, 2017).

The concept of 'integration' was introduced in the Integrated Education for Disabled Children Scheme in 1974. It made special children a part of regular schools. The most popular concept in the field of education, i.e., 'inclusion' is comparatively recent. The concept

was mentioned in 1995 after the Persons With Disabilities (PWD) Act came into effect. It made special education an integral part of regular schools. The following policies and programmes served as a sequential path for the emergence of inclusive education programmes (Table 2).

CHALLENGES RESTRICTING INCLUSION

Though various policies and programmes have been formulated and implemented from time-to-time to facilitate the education of disabled children, their enrolment rate is still

Table 1: Comparison of literacy rate — general and disabled population

| S. No. | Category | Literacy rate of general population (%) | Literacy rate of disabled population (%) |
|--------|----------|-----------------------------------------|------------------------------------------|
| 1. | Male | 82.14 | 62 |
| 2. | Female | 65.46 | 45 |
| 3. | Total | 74.04 | 55 |

Source: Census 2011 and Disabled Persons in India: A Statistical Profile 2016

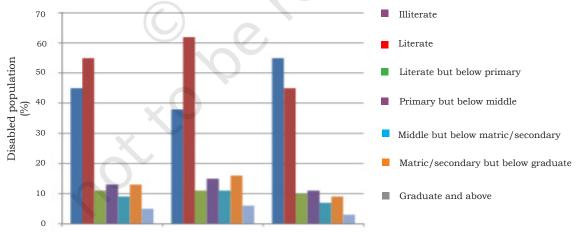


Figure 5: Educational status of disabled population in India (in %) according to Census 2011

Source: Disabled Person in India: A Statistical Profile 2016

low. The scenario becomes clear as Mall (2012) says: "The Indian scenario reveals that 20 million children in the age group of 6–14 years require special appeal to education, while the national average of gross enrollment in initial grades of many education has crossed 90% mark, less than 5% of children with disabilities have reached the school system".

There are various issues that restrict the path of inclusion of disabled children. According to Singh (2014), lack of knowledge and understanding regarding individual differences and unwelcome attitude of teachers towards disabled learners play a major role in restricting the success of inclusive practices. Das and Kattumuri (2010) identify two major barriers to inclusion in their research, including bullying by non-disabled peers and

attitude of teachers. Singh (2016) observed that poor socioeconomic condition of many disabled children, lack of adequate human and material resources, negative attitude of teachers, community members, non-disabled peers and their parents, inadequate teacher training in special education, large size of classrooms and scant support services in classrooms are major challenges in implementing inclusive education in true spirit. To support his observations, he cites Das, Kuyini and Desai (2013), who found in their study that 87 per cent teachers in India did not have access to support services in classrooms. Therefore, these issues need to be taken seriously by the authorities concerned in order to ensure the success of inclusive education programmes.

Table 2: Policies and programmes for inclusion

| | Tubic 2. I dilotos una programmos to | |
|------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| Year | Programmes and policies | Focus |
| 1974 | Integrated Education for Disabled Children | To admit children with disability in regular schools |
| 1985 | District Primary Education Programme | To universalise primary education |
| 1986 | National Policy on Education | To integrate children with mild disability in mainstream education |
| 1987 | Project Integrated Education for the Disabled | To encourage neighborhood schools to enroll disabled children |
| 1995 | Persons With Disabilities Act | To take actions encouraging inclusion |
| 1999 | National Trust for the Welfare of Persons with Autism, Cerebral Retardation and Multiple Disability | To promote inclusive education |

| 2000 | Sarva Shiksha Abhiyan | To provide universal access to education to children up to the age of 14 years, irrespective of class, caste, ability, etc. |
|------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 2002 | 86th Amendment to the Constitution | Education made a Fundamental Right for all children in the age group of 6-14 years; for disabled children it is 6-18 years |
| 2016 | Rights of Persons With Disabilities Act | To recognise 21 forms of disability |

Provisions for Inclusion

For the success of inclusion, a number of factors, including provisions, need to be modified. The context and environment of learning is one of them. It is required to modify and revamp the physical infrastructure in schools and other educational institutions to make it convenient for the disabled. Emphasis must be laid on cooperation and not competition in order to enhance interaction among children. Besides, there needs to be diversity in the use of teaching-learning material to ensure optimal learning of each learner. There must be flexibility in the selection of content during curriculum development so that the needs of all children are met. Individualised instruction is the best way to handle disabled students. Along with these changes, encouraging and welcoming attitude of peers is necessary for the success of inclusion.

According to Nanda, et al., (2009), "If inclusion is to be a feasible alternative to special education

placements, its success will depend largely upon the peer group's readiness and willingness to accept disabled friends in regular class." Besides, the role of a teacher is one of the most important factors for the success of inclusion. According to Chadha (2005), "Teacher is the ultimate key to educational change and social improvement." Therefore, without providing appropriate and adequate training to teachers handle diverse groups of learners, the cited strategies may become There needs to be meaningless. adequate pre-service and in-service programmes for the capacity building of teachers.

Conclusion

The MSPI report points out that literacy rate among the disabled population increased from 49 to 55 per cent, i.e., merely six per cent from 2001 to 2011. It is because disabled children face discrimination in the form of unwelcoming attitudes

from teachers and peers, and lack of adequate policies and legislation. As a result, they are 'restricted' from realising their rights and become one of the most marginalised and excluded groups in the society. Therefore, the attitude of peers and teachers must be encouraging and welcoming to make inclusion more feasible. Moreover, there is an urgent need to restructure and overhaul the educational system in India in order to ensure the empowerment of disabled students and transform them into self-reliant and self-sustained confident adults. Diversity of need is undoubtedly a challenge but is also an opportunity to enrich learning and social relations.

REFERENCES

- Barton, et al. 2015. 'Early Childhood Inclusion: Challenges and Strategies from the 2014 Preschool Inclusion Survey'. *Electa*, pp. 1–4.
- Bhokta, N. P. 2012. 'Inclusive Education'. In *Inclusive Education* (1st Ed). Bharti Publishers and Distributors. New Delhi, India. p. 11.
- Chadha, A. 2016. 'Inclusive Education in India: A Road Map'. *Yojana*. New Delhi, India. Vol. 60, pp. 38–41.
- Das, A. and R. Kathumuri. 2010. 'Children with Disabilities in Private Inclusive Schools in Mumbai: Experiences and Challenges'.

 Retrieved from https://www.researchgate.net/publication/254729826_Children_with_Disabilities_in _Private_Inclusive_Schools_in_Mumbai_Experiences_and_Challenges.
- Indian Census Bureau, 2001. Census 2001. Government of India. New Delhi, India.
- ——. 2011. Census 2011. Government of India. New Delhi, India.
- Mall, S. K. 2012. 'Indian Democracy and Inclusive Education'. In *Inclusive Education* (1st Ed.). Bharti Publishers and Distributors. New Delhi, India, pp. 136–137.
- Nanda, et al. 2009. Knowledge and Attitudes of Post-secondary Non-Disabled Learners towards Disability and Inclusive Education. *National Journal of Education*. Sage Publications. New Delhi, India. Vol. 10. No. 2, pp. 87–98.
- Sidhu, R. 2017. 'Difference between Special, Integrated and Inclusive Education'. Retrieved from http://learningmaterialghg.blogspot.com/2017/10/ difference-between-special-integrated.html?m=1.
- Singh, Y. P. 2014. Is Inclusion of Children with disabilities practically possible? Retrieved from Is_Inclusion_of_Children_with_disabilities_practically_possible.
- Singh, J. D. 2016. Inclusive Education in India Concept, Need and Challenges. *Scholarly Research Journal for Humanity, Science and English Language*. Vol. 3. No. 13, pp 3222-3232.

Acquisition of Leadership Skills at the Primary Stage

Ruchi Dwivedi*

Abstract

Primary school students evolve constantly as they are in the formative stage of their lives. Apart from being imparted basic education, they need to be trained in leadership skills from an early age. Therefore, the teaching fraternity needs to put in conscious effort to develop leadership skills in the students. The acquisition of leadership skills helps enhance the students' academic, as well as, social performance. These skills enable them to learn the art of sustaining and nurturing relationships, defining identities, problem-solving, and thereby, achieving the desired goal. Taking this into consideration, this paper tries to analyse different leadership skills at the cognitive domain, which play a critical role in the overall development of students at the primary stage.

Introduction

The relative outlook on 'leadership' formulates it as a process, skill, trait, attribute and quality that emphasises skilful social interaction and relationship. This initiates reflection on the fact that leadership includes influencing others and leading one's own self in a certain direction. Leadership is a critical aspect of all social endeavours. School leadership impacts all facets of education —

policies for educators, administration or school authorities, teaching-learning process — thereby, shaping the conditions and environment in which the teaching-learning process is to take place.

LEADERSHIP SKILLS AMONG PRIMARY SCHOOL STUDENTS

The Indian education system has witnessed various aspects that have evolved with time, i.e., right from the

^{*} Research Scholar, Department of Education, Faculty of Education and Psychology, The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat.

ancient period. "There has been a radical change in the Indian education system from teaching the *Vedas*, religion, scriptures, etc., to coaching about technologies like virtual reality, programming, technology and others" (Moller, 2005). After Independence, a number of schools came up in the country in order to impart quality education to all children.

The common theme that runs across all leadership theories is that leadership is no longer confined to powerful individuals, directing others and giving long speeches before thousands of people, and imposing their decisions on others. "Rather, it is about fostering collaboration, common working towards and acting as a leader in any role regardless assumed. of whether it meets the classic definition of a leader" (Kolzow, 2014).

The major objective of primary education is to impart literacy, numeracy, creativity and communication skills to students. They should develop a desire to with continue learning ability critical thinking and logical judgment. Moreover, they should be taught to appreciate and respect the dignity of work, social standards, moral and religious values. "The need for systematic approach to school leadership development in India has become significant in the context of government policy initiatives in support of the Right of Children to Free and Compulsory Education Act 2009, the right to quality education, and

other educational reforms" (Recommendations on Proposed New Education Policy, 2016).

The realisation of these initiatives directed towards developing effective school leadership depends on higher authorities, as well as, students willing to learn. But, unfortunately, a majority of students in the country do not receive formal training for developing the base that can help them learn the required skills, including leadership.

Some of the challenges that primary school teachers face in the Indian school system are as follows.

- Varying levels of knowledge of content and pedagogy among teachers
- Rise in pupil strength
- Mismatch between advanced technology and ideology of old teachers who are rigid in their approach

It is ironical that schools in India follow an insular firm rule, where customised daily activities take place leading to a monotonous arrangement (prescribed curriculum from policymakers, educators, etc.). "There are no structured and reliable ways of developing accountability systems and practices for school leadership (other than the narrowly defined board exam results yearly academic results)" 2011). This arrangement causes dearth of dynamic leaders in schools, who would take a lead in various activities.

Routine activities assume greater importance rather than creative thoughts and workouts. "There are not many organisations that can help bring development and empowerment among school student leaders. The prescribed initiatives seem to be good for school leaders but not enough as they still cover only a small mass of students" (Pont, et al., 2008).

"The current scenario of school students actually endorses some concrete mechanisms from the (CPSEs, government" 2011). mechanisms need to include tangible ideas with support of best practices from leadership development models for students. It must be noted that teachers are working with little freedom to innovate and try new strategies or execute creative ideas.

DIMENSIONS OF LEADERSHIP WITH RESPECT TO COGNITIVE DOMAIN

Skill development at the cognitive domain involves progressive construction of erudition skills, such as concentration, remembrance and ideas. These skills enable children to process sensory information and eventually help them learn to evaluate, analyse, remember, draw comparisons, and understand the cause and effect of various issues. These skills help analyse how a learner understands new information and recalls concepts. Most schools do not test cognitive skills and only focus on achievement test. Understanding the cognitive strengths and needs of students is the key to effective learning. With regard to the efforts of primary students in day-to-day classroom activities, they are expected to follow a set of prescribed directions to complete assignments and homework. They need to develop problem solving skill at the primary stage and sustain it throughout their scholastic career as they prepare for social life.

All these characteristics can be inculcated in students if they are provided with quality education. The dimensions of leadership in primary students represent a wide range of these characteristics and skills. However, these dimensions of leadership are neither a checklist of things to be accomplished, nor a scale of perfection against which leaders measure themselves. acquisition of these skills helps students understand life better and enable the development of systematic thought process in them. Taking a note of these points, this paper tries to encapsulate the cognitive domain, which plays a crucial role in the development of leadership skills among primary school students.

Strategic planning skills

"Strategy is not the consequence of planning, but the opposite: it's the starting point" (Mintzberg, 1994). Great leaders are outstanding at strategic planning. They have the ability to look ahead and anticipate with some accuracy. Strategising helps a child analyse and evaluate how to accomplish a work before and while attempting it. Strategic planning is

the process of setting a vision and realising it through small, achievable and practical goals. Students, who work with strategic planning, set goals, decide what actions need to be taken, and help others achieve those goals. Planning always starts with goal setting. But it is not a single process exercise. It requires the collaboration of other skills that can help fulfill the real objectives of strategic planning.

Goal setting skill

Goal setting is the process of identifying the desired accomplishments and targets for an individual. It varies from person-to-person and time-to-time. A successful leader always maintains a positive and direct approach in life. It does not matter what is going on around such a person. The leader always stays focused and is not carried away by success or depressed by failures. Therefore, the students need to focus on their goals. They need to be clear about what they want to achieve and how they can achieve the goals. Therefore, they must be encouraged to write their goals and the strategic actions they plan to take in order to achieve the set targets. They need to work to accomplish their goals every day. Such actions are only possible when the students are able to differentiate between right and wrong, and problem and solution. Besides, they must possess decision making skill when they actually set a goal. This process can involve another skill called 'analytical skill'.

Analytical skill

This refers to the ability to analyse the given information, solve the problems and make correct decisions. Being analytical requires critical observation of a situation, concept or an event. Observation and asking questions are the key factors required for developing and improving analytical skills among students. A student, who sets a goal for strategic planning, must be able to analyse and evaluate one's plan and its importance. This ability inculcates many skills in the students like paying attention to details, critical thinking, decision making and problem solving.

Critical thinking skill

Developing analytical skill is not possible without critical thinking. Critical thinking is the ability to evaluate a situation or problem. It infers that students should not accept an argument, information or assumption without raising questions. This requires breaking down a concept into steps or processes in order to make an independent evaluation to get the correct answer. This skill can be inculcated in students by providing them with question, discussion and waiting time during classroom teaching. "It is self-directed, self-disciplined, self-monitored and self-corrective thinking. It entails effective communication and problem solving abilities, as well as. a commitment to overcome our native ego-centrism and sociocentrism" (Defining Critical Thinking — Foundation for Critical Thinking, 2018). A critical thinker is able to deduce consequences from the knowledge at hand and knows how to make use of this knowledge in order to solve the problems.

Communication skill

Another important quality that leaders strive to perfect is the ability to speak effectively and persuasively. Until a person communicates clearly, it is difficult to get the desired results or outcomes. A persuasive and effective communicator can be a good leader. If the students use this skill effectively, they, too, can achieve better results. Other than being an effective speaker, one also needs to hone the art of listening in order to ensure effective communication. Listening skill enables a person to stay focused when a speaker speaks and understand the contents of the speech. Students need to communicate consciously with teachers, classmates, family members and relatives.

Self-awareness skill

Integrity is undoubtedly the supreme quality of leadership. "Honesty and integrity are two important ingredients which make a good leader. With integrity, there is no need to fear, since nothing is there to hide" (Integrity and Values, 2018). The core of integrity lies in truthfulness. It is a common perception that students never lie until they learn to lie from their surroundings, and later, this behaviour creeps into their personality. Students assume that if their mistakes get

noticed, they may get punished. But honesty does not mean that the person is weak or unsure of something. It means that one has self-confidence and self-awareness to recognise the value of others without feeling threatened. They need to encourage others to shine rather than looking for the light for owning self.

Α successful student leader needs to continuously anticipate, evaluate and remain open-minded and flexible. If the student cannot influence others to become motivated around a common goal, they will struggle to be effective inside and outside of the classroom. As a leader, students should ooze with confidence and be assertive to command respect from teachers and peer students. The student leader must not be afraid of being challenged.

Conclusion

Education is the most important asset that can endow the society with skilled student leaders. There is a need for a paradigm shift in the education system. Therefore, to strengthen the quality of leadership and educational administration in India, policy makers and administrators, school authority and teachers need to take concerted actions. Altering traditional mindsets in school is not easy and sustaining the change is even more challenging. The greatest challenge for a student leader is to develop practicable components of culturally significant standards of skill via teaching and learning in the classroom setup. By introducing small changes in the curriculum and pedagogical practices, there will be a positive impact on the classroom environment, which will encourage students to ask questions, and hence, develop critical thinking skill. All these skills help develop leadership qualities in the students, and cultivate them into strong and effective leaders.

REFERENCES

- ARCIA, G., ET AL. 2011. School Autonomy and Accountability. SABER, World Bank.
- CPSEs. 2011. 'Report of Panel of Experts on Reforms in Central Public Sector Enterprises'. Planning Commission, Government of India, New Delhi, India.
- Kolzow, D. R. 2014. Leading from within: Building Organizational Leadership Capacity.
- MINTZBERG, H. 1994. Rethinking Strategic Planning Part II: New Roles for Planners. *Long Range Planning*. Vol. 27. No. 3, pp. 22–30.
- Moller, J. 2005: Reason and Emotion: Coping with Accountability, in Sugrue, C (Ed.). *Passionate Principalship: Learning from Life Histories of School Leaders*. Routledge Falmer. London, UK.
- PONT, B., ET AL. 2008. Improving School Leadership. Vol. 2.

WEBSITES

- Defining Critical Thinking Foundation for Critical Thinking (2018), Retrieved from https://www.criticalthinking.org/pages/defining-critical-thinking/766.
- Integrity and Values (2018), Retrieved from www.integrityandvalues.com/leadership-traits/ Recommendations on Proposed New Education Policy (2016), Retrieved from www.ncpcr.gov.in/showfile.php?lid=1118.

BOOK REVIEW

Jungle ki Kahaniyaan

Seema Shukla Ojha*

Title of the Book : Jungle ki Kahaniyaan

Author : Horacio Quiroga

Translators : Aprajit Chattopadhyaya

and Suresh Dhingra

Publication: Prakashan Sansthan,

New Delhi

Year of Publication: 2018

Total No. of Pages: 86

The book originally written in Spanish as *Cuentos de la Selva* by acclaimed Latin American writer Horacio Quiroga, is popular among children in Latin America and countries with Spanish speaking populations. It was also included in the curriculum for schools in Latin America. The book's popularity was such that it was translated into many languages. In English, it was published under the title *Jungle Tales*. The Hindi translation *Jungle ki Kahaniyaan* marks the 100th

जंगल की कहानियाँ

ओरासिओ किरोगा

अपराजित चट्टोपाध्याय • सुरेश धींगड़ा



anniversary of its first publication in the language.

The book consists of eight short stories, carrying morals and values, making it apt for the young minds in elementary schools.

Friendship and alliance mostly run in the themes in the stories.

^{*} Professor, Department of Education in Social Sciences, NCERT, New Delhi.

The first story narrates compassion and reciprocity between a man and a giant tortoise. The second is an amusing tale about why flamingos have red legs and why they like to spend most of their time in water. The third is a tale of an innocent parrot. The fourth story is about the consequences of people not respecting wisdom and experience. The fifth is about maternal love, healing and friendships. The sixth story narrates how a young cub gets into trouble by not following the advice of its mother and wandering out of the jungle into a farm. However, it ends with a beautiful relationship established between the cub and children of the farm owner. The seventh is a tale of compassion and reciprocity between a man and stingrays. The last tale is about a lazy bee and how it transforms itself into an active and cooperating being.

In all these stories, Quiroga has beautifully captured the magic and mystery of the jungles of South America. Through this collection, the author emphasises values of friendship, cooperation, justice, etc.

The language of the translated version is lucid and creates vivid images in the mind of the readers. It transports the readers to the mysterious land of the jungles rich in flora and fauna. The names of local customs and cuisines also find a mention in the stories. These names are used along with their Indian synonyms, lending stories a local feel. Moreover, by doing so, the translators have tried to introduce the children of India to a new culture.

This collection may remind the readers of the famous *Panchatantra* tales written by Pandit Vishnu Sharma. Each story of the *Panchatantra* ends with a moral. Therefore, the *Panchatantra* plays an impirtant role in imparting moral values to children at the elementary stage in the country.

Just like the *Panchatantra*, *Jungle ki Kahaniyaan* is a classic. The book enchants and motivates the readers with its interesting stories and moral values.

DID YOU KNOW

Earthquake Preparedness by Schools

Ridhi Sharma*

Earthquake' is the sudden shaking of the Earth's surface for a short span of time. Quakes are unpredictable in nature and cannot be prevented. Some are weak in frequency, and usually, go unnoticed, while few are higher on the Richter Scale and can cause severe damage to life and property.

However, it must be noted that most of the damage incurred in the event of a quake is caused due to the poor quality of building material used and violation of construction norms.

Many children may be aware of earthquakes. Some may even have experienced one. So, it is important to educate students at the elementary stage about disaster management, including quakes. A teacher may ask the students to perform an activity while introducing the concept of quakes. They may be asked to hold a pencil horizontally with both their hands. They can now be asked to imagine a situation of someone applying force to both the ends of the pencil. They would see the pencil bend. After enough force

is applied, the pencil would eventually break from the middle, releasing the stress put on it.

Hence, it may be explained that the Earth's surface is not one smooth plane but a crust made of plates, overlapping and binding each other. As the plates move, they exert force on each other. When the force is strong, the Earth's crust is forced to get disrupted. As a result, the stress is released in the form of energy that moves through the Earth's surface like waves. This is an 'earthquake'.

COMMON TERMINOLOGY

Epicenter

It is the point on the Earth's surface where a quake occurs. Most damage is caused at the epicenter. While explaining the concept of epicenter, the teacher may ask the students to imagine throwing a stone in a pond, causing ripples or concentric circles. The epicenter is the spot, where the

^{*} Junior Project Fellow, Department of Elementary Education, NCERT, New Delhi.

stone drops and the waves indicate the force of the earthquake becoming lesser as they move away from the centre.

Seismic waves

The energy created by the quake travels in the form of waves from the epicenter. These are 'seismic waves'. Depending on the frequency of the quake, the waves may cause severe damages to life and property.

Richter Scale

It is an instrument used to measure the intensity or magnitude of a quake.

Tsunami

It is a series of oceanic waves caused by an underwater quake or volcanic explosion. Tsunamis are different from tidal waves.

Techtonic plate

Also called 'lithospheric plate' of the Earth's crust, it is a massive irregular shaped slab of solid rock composed of continental and oceanic lithosphere.

SCHOOL PREPAREDNESS

As quakes are sudden in nature, school authorities need to take appropriate measures in order to prevent the loss of lives and property. This is all the more important for schools located in quake-prone regions. Earthquake preparedness requires proactive participation by all stakeholders, including administrators, school authorities, teachers, students, parents, as well as, those who design,

build, regulate and maintain school buildings. The school authorities must conduct mock drills from time-to-time, and encourage students and staff to participate in these activities. Besides, safety audit of school buildings must be carried out on a regular basis. Depending on when and how the buildings were designed, built and furnished, existing school buildings may have structural vulnerabilities.

Safety first

- Safety training workshops and mock drills must be conducted for staff members and students, with emphasis on 'drop, cover and hold' during earthquakes.
- The curriculum must include a chapter on disaster management, including earthquakes.
- Identification of locations, where people can take shelter in the event of a quake be made. These may be outdoors away from buildings, trees and power cables.
- Earthquake preparedness must be integrated into the schools' emergency preparedness, response and recovery planning.

Community awareness

- As part of earthquake preparedness, secondary students can be trained to reassure primary students when shifted to a safe open area.
- Teachers must try using age-appropriate vocabulary and

- examples to teach students about earthquakes.
- All this will help transform young students into responsible adults, who will ensure construction of quake-resistant buildings and contribute towards reducing risks and hazards that can cause damage to life and property.

POTENTIALLY DANGEROUS ITEMS — NON-STRUCTURAL COMPONENTS

In addition to frequent safety drills, school authorities must secure non-structural components that may cause casualties and destruction in the event of an earthquake. Common non-structural components include ceilings, windows, computers, things kept on shelves, almirahs, AC units, electrical appliances, furniture, etc.

It is important to understand why non-structural components in a building are of concern in case of an earthquake. These items shake when an earthquake occurs and may slide, swing, strike with other objects or overturn. They may slide off the shelves and fall on the floor or over people. Such items include broken glass pieces, overturned tall and heavy cabinets or shelves, collapsed false ceilings or overhead light fixtures, ruptured gas lines, damaged asbestos material, broken pieces of decorative brickwork, etc. There is a possibility of some casualty due to these falling non-structural components. So, even though they may seem harmless, these items may become hazardous.

MAKING SCHOOLS SAFE

School authorities need to take appropriate steps in order to reduce risks associated with earthquakes. First of all, they must identify areas in a building that may have higher occupant load. It must be ensured that all non-structural items are securely anchored as they may cause loss of life and property in case of an earthquake. When a quake strikes, students and staff members may take shelter under desks and tables in order to protect themselves from falling objects like light fixtures and ceiling tiles. However, the authorities must note that debris falling in hallways and stairs can obstruct people's movements as they try to escape the site. Wall-mounted cameras and televisions sets are common in schools and may cause falling hazards. They may add to the panic, especially, when quake is accompanied by a power snag.

Hence, design and construction professionals may be consulted to secure non-structural components. Besides, the school authorities must ensure regular maintenance of all electrical appliances installed in their respective campuses. Students may also be encouraged to help mitigate non-structural hazards. Moreover, preparing students on how to behave and the measures that need to be taken in case of a natural disaster like an earthquake is one of the best ways to reduce trauma and maintain their mental and emotional well-being.

Virtual Reality — A Pedagogical Tool for Young Learners

Nagma Sahi Ansari*

It is a known fact that role-play helps young learners understand and experience real life situations with ease (Erikson, 1968; Blatner, 2009; Bowman, 2010). It enables them to understand different points of view and situations. Apart from teaching empathy, role-play also gives the learners an opportunity to express themselves creatively. Therefore, in this age of technological advancement, there is a need to shift from conventional classrooms to novel teaching tools in order to make learning a more engaging and enjoyable experience for students. One such way is exposing the students to 'Virtual Reality', which is somewhat similar to role-play that promotes experiential learning.

Using Virtual Reality, a learner is able to get a 360-degree or three-dimensional (3D) view of the environment. This is, particularly, useful when the learners are taught about places that they may not be

What is Virtual Reality?

Virtual Reality is a technology that uses a headset attached to a computer. It is a device that virtually transports a learner to the environment one is exploring. Virtual Reality has been in existence since the late 1960s but its application to education and classrooms has gained popularity recently because of the increasing usage of digital technology.

able to experience in real life. For example, showing the Himalayas to a learner, who lives by the ocean, using Virtual Reality, can go a long way in introducing new vocabulary, themes and concepts.

The difference kev between Virtual Reality and other multimedia like videos or two-dimensional animation is the factor of (2D)'immersion'. Since a Virtual Reality experience places the learner at the centre of exploring a world created by computer graphics, texts and music, it incorporates all positive stimuli of multimedia.

^{*} Research Scholar, Jamia Millia Islamia, New Delhi.



Figure 1: A learner with a Virtual Reality headset

The potential of this technology is immense as its applications can be utilised across the curriculum. For example, through Virtual Reality, students can get a tour of the Milky Way, and celestial objects like the Sun and the Moon without even visiting a planetarium.

Academic curricula are fast changing to keep pace with the rise in digital and mobile interactions. It is becoming common for schools to invest in computer and Internet based learning. There are also devices like smart boards, which make learning more interactive and engaging. It is, therefore, interesting to see how tools like Virtual Reality may be utilised to foster integrated learning environments.

Conventional pedagogy is detached from real world practices. Though field trips, project works and role-play help in experiential learning and exploration, these activities are extensively supervised by teachers. Moreover, each student is expected to study at the pace of the entire class. Besides, conventional pedagogy hardly

develops self-study and exploration skills in students, whereas, Virtual Reality allows them to explore, thereby, promoting self-study. For example, during the classroom observation as part of my research, I could see how students responded differently in a Virtual Reality experience about butterflies. One student wanted to see what the blue butterfly did, while another followed an orange one. Eventually, both the students learnt that butterflies suck nectar from flowers. Therefore, the stimulus of joy of being surrounded by realistic flowers, butterflies and sounds of nature will not only make learning enjoyable and exciting for the students but also help them recall whatever experience easily.

To nurture learners' potential, educators need to analyse the kind of environment that would help them engage with the society they are a part of.

Constructivist pedagogy affirms how contemporary learners are not mere passive receivers of knowledge but actively engaged content creators and meaning makers (National Curriculum Framework. 2005). Learners are also making use of their situatedness in technology to explore and learn as it can provide experiences that were previously off-limit (Allison and Hodges, 2000). Often, parents use Internet based research (text, images and videos) to support the learning of their wards. Virtual Reality is a step ahead because of the 'simulation' and realistic experience it provides the learners. This has led scholars explore how Virtual Reality can help create an experiential learning platform for greater autonomy and interactivity (Chee, 2001; Bailenson, et al., 2008, and Hamilton, 2016).

Studies have shown that Virtual Reality can enhance problem solving skills and encourage impactful learning through first-hand experiences (Pan, et al., 2006). According to Gutiérrez, et al., (2008), there are three categories of technology and degrees of immersion that can help learners enhance their learning — non-immersive (desktop screen based), semi-immersive (computer based games cinema projections) and fully immersive (Virtual Reality with head mounted device). Such experiences are low cost, making it a viable option for schools and educational institutions.

Virtual Reality gives experience to learners. For example, the application, 'Sharecare You', allows them to recognise and learn about different body parts in an interesting manner. 'Show and Tell' exercises are also being carried out using Virtual Reality platforms, which enable learning with the help of models and objects. A learner finds oneself around the object one is describing. It makes for a fun exercise, as well as, helps recall things faster.

Another example of Virtual Reality is a drawing tool called 'Tilt Brush VR'. Learners can choose from a visual list or menu of brush types and draw or paint in 3D.

Yet another application area is building speech through Virtual Reality. Learners, who experience social anxiety and are not confident in public speaking, can be encouraged to practice speaking in an experiential environment of virtual listeners. This will instil confidence in them.

However, it may be ensured that Virtual Reality experiences are shorter for kindergarten and primary stage learners.

Virtual Reality platforms also bridge global boundaries by allowing learners from different countries to live stream their educational seminars or field trips. This inculcates a sense of social learning, thereby, encouraging multicultural and diverse learning. Such a platform would be hugely beneficial for a diverse country like India. Teachers across the globe are switching to Virtual Reality environments to teach life skills to students, which may be difficult to impart in a conventional classroom setup (Youngblut, 1998).

Therefore, it can be said that Virtual Reality propels learners to visualise models and develop problem solving skills. Though Virtual Reality solution for a situated learning experience, it should not be used to substitute conventional forms of teaching, rather supplement it. In order to benefit from such an innovative platform like Virtual Reality, it must be ensured that schools are equipped with such devices and teachers are trained in operating them.

REFERENCES

- Allison, Don and Larry F. Hodges. 2000. Virtual Reality for Education. Proceedings of the ACM Symposium on Virtual Reality Software and Technology, pp. 160–165.
- Bailenson, J., et al. 2008. The use of immersive virtual reality in the learning sciences: digital transformations of teachers, students and social context'. *Journal of the Learning Sciences*. Vol. 17, pp. 102–141.
- BLATNER, ADAM. 2009. 'Role-playing in education'.

 Retrieved from http://www.blatner.com/adam/pdntbk/rlplayedu.htm
- BOWMAN, SARAH. 2010. The functions of role-playing games: how participants create community, solve problems and explore identity. McFarland and Company Inc. North Carolina, USA.
- Chee, Y. S. 2001. Virtual Reality in Education: Rooting Learning in Experience. International Symposium on Virtual Education. Symposium Organizing Committee, Dongseo University. South Korea, pp. 43–54.
- Erikson, Erik H. 1968. Identity: Youth and Crisis. Norton. New York, USA.
- GUTIERREZ M., ET AL. 2008. Stepping into Virtual Reality. Springer. London, UK.
- Hamilton, I. 2016. 'Exclusive: Titans of Space 2 Arrives in Early Access Next Week for Vive and Rift'.
 - Retrieved from http://uploadvr.com/titans-space-2-arrives-early-access-next-week-rift-vive.
- MAJEE, SUBHADIP. 2017. Learner with VR headset. Digital Artwork. West Bengal. India.
- National Council of Educational Research and Training. 2005. *National Curriculum Framework 2005*. NCERT. New Delhi, India.
- Pan, Zhigeng, et al. 2006. Virtual Reality and Mixed Reality for Virtual Learning Environments'. Computers and Graphics Elsevier. Vol. 30. No. 1, pp. 20–28.
- Youngblut, C. 1998. Educational Uses of Virtual Reality Technology. Institute for Defense Analyses. Virginia, USA.

WEBSITES

Sharecare You (n.d.) Retrieved from https://store.steampowered.com/app/730360/ Sharecare_VR_2017/

Tiltbrush by Google (n.d). Available at https://www.tiltbrush.com/

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 grassroot 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:

Academic Editor The Primary Teacher G. B. Pant Building, NCERT Sri Aurobindo Marg New Delhi – 110016

e-mail: primaryteacher.ncert@gmail.com

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.

Regd. No. 28935/76

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

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

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

For further enquiries, please write to:

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

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



राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद् NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING