

Experiences of Working with Textbooks in the Early Grades

Saurav Shome, Archana Dwivedi, Monu Kumar, and Pramod Kandpal



Indian classrooms have often been blamed for being dictated to by the textbook (Kumar, 1988). The report *Learning without Burden (Government of India, 1992)* observed the disappointing state of teaching-learning in the Indian education system. It noted that the curricula transacted in the classroom with the students are both meaningless and irrelevant to students and therefore incapable of engaging young minds in the process of teaching-learning. NCERT textbooks (NCERT, 2006, 2007) prepared and published after National Curriculum Framework 2005 (NCERT, 2005) seems to address the observed alienation.

In this article, we will present our experience of using grades 1 and 2 NCERT textbooks in our school.

We will first write about the context of school and introducing NCERT textbooks in classroom, the pedagogic challenges we faced in the classroom, aspects of pedagogy we were trying to establish in classroom, how NCERT textbooks helped us realise our envisioned pedagogy and the limitations of the textbooks. At the end we have also noted our overall learning and plan for future work.

The school's context

The Azim Premji School is situated in a village in Uttarakhand. The school is committed to providing quality education at elementary level while abiding by the norms and ethos of Right to Education Act (Government of India, 2009). The students come from lower to middle income groups and many of them lack academic support at home.

The school is affiliated to the State Board and has been following State Board textbooks from its inception in 2012. In the current academic year, the Government of Uttarakhand asked all the schools to introduce NCERT textbooks. The state education department printed the books at the state level and made them available in the market. However, we procured NCERT publications directly and distributed them to the students.

Context of teaching at grades 1 and 2

We mentioned earlier that many of our students lack academic support at home and many of them are first generation learners. The students' language and textbook language also differs to a great degree. Therefore, teachers have to constantly engage in addressing the reality of multi-level classrooms and ensure the students' pace of learning. Despite several efforts, we found that raising most of the students' grade-appropriate learning level at grades 1 and 2 was a difficult task.

Our school has continuous teacher professional development initiatives and processes in place. As a community of teachers, our vision of education is that education should be problem-posing, authentic (Freire, 1968), connected to the real world and relevant to and meaningful for students. There should be opportunities for group work, integrating students' voices and carrying out formative assessment (Black & William, 1998) in teaching plans. Teaching units should be presented to the learners in the form of themes rather than piecemeal as subjects (Dewey, 1923). There are suggestions in research literature to make curriculum coherence in alignment with the expectations set by NCF 2005 (NCERT, 2005) as well as the realities of the Indian classroom, while focusing on subject integration, group work, assessment and classroom management (Shome & Natarajan, 2013). In this context, we have found that NCERT textbooks provide solutions to many of our challenges and meet our envisioned pedagogy.

NCERT textbooks and envisioned pedagogy

In the beginning of the academic year, when we introduce the textbooks in grade 1 and 2, we have found that students of grade 2 find it difficult to cope with the standard because all the concepts dealt with in grade 2 were constantly referring, explicitly or implicitly, to the concepts taught at grade 1. Therefore, we decided to merge the two grades and introduce the textbooks in succession to all the students. In addition to that the authors of this article collaboratively read textbooks of all the subjects of these grades and planned the teaching units. These teaching units had focused on the aspects discussed below in connection with the use of textbooks.

Problem- posing and activity-based teaching

Overall, using the textbooks resolved several problems for both students and teachers in the classroom. We carried out all the activities, question-answers, reciting poems from the textbooks with the entire class of students. In several cases we first demonstrated all the activities to the whole class and asked questions after the demonstration, such as *What floats and what sinks? What is heavy and what is light?* As part of activity- based teaching, students created calendars, carried out data collection on a number of students in each class on preferences such as choice between egg or milk and number of doors and windows in classrooms, etc. Later they presented their work in a *Baal Sোধ Mela*. Similarly, students sowed seeds in pots, observed germination of seeds, and growth of the plant over a period of two months.

The exercises given at the end of the lessons are interesting. While doing the exercises students are able to read, write, and present their views with arguments. Lessons such as *Angootha ki Chhap, Boojho Mera Rang, Haat ka Khel, Kya Bhata Hai, Kya Nahi Bhata Hai* provided ample opportunities to the students to learn while playing.

Group work

Students were given a number of opportunities to work in groups. The dominant mode of group work was solving the textbook problem together while reading the textbooks.

Connecting the text to the real world

The content of the textbooks, particularly in mathematics and Hindi, have plenty of real world connect. The visuals are related to the students' experience: there are images of kitchens,


classrooms, schools, scenes of recess and villages with nothing very different from what they observe around them. All the words used in the Hindi and mathematics textbook are simple and familiar to the students' experiences. This not only helped students engage with the content, but also helped them to understand concepts better. For example, teaching the concept of place value was always a difficult task in the early grades. The use of currency notes and coins helped students develop the concept by better connecting it with the situation of real life transactions. Students understood that ten one rupee coins are equal to a ten rupee coin or note.

Similarly, in the English textbook, the familiar example of a merry -go -round, followed by a lesson on circles, providing the opportunity to use the circle for making different images, finally introduces the idea of other shapes.

In the mathematics textbook there is focus on reading and comprehension of real world problems that require mathematical operations or mathematical thinking. Most of the numerical problems are presented in context with lots of text. This also enhances the reading and comprehension skill of students provided the teachers helped the students to read and allowed to solve the problems in the textbook at their own pace. There is enough scope for students to engage with the material on their own and collect data, such as using their own feet to measure the length of a mat or their classroom.

Subject integration

Thus, there is a thematic coherence in the mathematics, Hindi, and English textbooks. There are topics connected to environmental awareness, sensitivity and activism in all the textbooks which would later connect to EVS taught as a separate subject in grades three to five. There are also topics on sinking and floating, rolling and sliding primarily in mathematics and then in both the language textbooks with the potential of developing into very sophisticated concepts in physics. Other examples are poems about trees to show the importance of trees in our lives and that of other animals. Other ideas, such as seed sowing and taking care of animals, movement, clouds, rain, rainbow, different type of houses, animals and their young and their habitats expressions, family, body parts, are introduced in both English and Hindi.



In both English and maths and, to some extent, Hindi common concepts like shapes, describing locations: *up, down, near, far, inside, and outside* etc. are presented.

The textbooks provide opportunities to introduce different forms of students' expressions as well as pedagogical approaches like singing poems with action, story-telling, role play, art and craft work (for example, making a tree, rainbow, kite, flowers, etc.), pictures of play and games, different art forms like *Madhubani* and *Warli*. This, in a way, closes the gap between traditional ideas of scholastic and creative domains.

Fostering values and skills

Both in content and presentation, the book introduces the values required for democratic society. In the English textbook for example, a tailor talks with a pig about each helping the other. In another story, a tiger and a mosquito show that everyone has something great in them and no one can be categorised solely as being either strong or weak. The stories in the textbooks end with constructive messages. This textbook helps foster the ability to argue, estimate, analyse, express their views and ideas, and imagine.

Gender balance and environmental sensitivity

There is an attempt of maintaining gender balance in the textbook, though there are occasional exceptions, as in a poem *A Nice Boy Like Me* is mentioned, or in the case of animals, which are mostly referred to as *he*.

Textbooks as an effective tools

Getting appropriate and readymade tools of learning is a big challenge in our context. However, these textbooks provide the required backing and suggested the resources readily available in our surroundings. In addition to that, while introducing varied content the textbooks provided a legitimacy of rich literature available for use in the classroom.

There was clear focus on introducing particular letters and words in Hindi and English textbook. For instance, there was a picture story called *Aam ki kahani* in the Hindi textbook which enabled students to express their views based on the picture story, ask and answer questions. While teaching another lesson on leaves, we collected leaves of different kind from the school compound, followed by a discussion on the shapes of the leaves, the differences in them and compared each with the

names written in the book, thus helping them to recognise letters and guess the whole word.

Overall comments about the textbook

The design of the textbook facilitates learning. The font size of the letters is appropriate for young students. The quality of paper is good enough to handle and use as worksheets. The colour composition is varied and fits the theme of each lesson.

The content and presentation of the book provides scope for formative assessment. We have used NCERT Learning Outcome Indicators (NCERT, 2017) to keep track of the learning levels achieved by the students. Integrating the subjects across theme, content, concepts, skills and values, it reduces the curriculum burden of both the teachers and students. The textbook helps sustain the interest of students and engages them in learning by weaving in a lots of activities, interesting yet challenging tasks, orchestrating very sophisticated concepts as a network of ideas in both language and mathematics textbooks. As a result we were able to extend our class period to one and a half hours or more every day for each subject. Sometimes, we even dedicated one whole day for one subject.

Finally, it is important to note that no single textbook is sufficient at any level of school learning and the NCERT textbooks are no exception. However, it is interesting to note that the textbook successfully collated a rich variety of resources and therefore opened up a world of sources for teachers to look for and bring in classroom as aids to their teaching.

We mentioned early in this article that for our students and school context the English textbook of grades 1 and 2 are difficult for us to deal in classroom at the initial stages. In order to use the English textbooks better in the classroom we need a well-defined pedagogic intervention of third language teaching in place. We should mention that we often use the term *second language* for all the languages other than *first language*. However, in this article, we have used the term third language as something more distant even than the second language, that is Hindi in our context. Garhwali is first language for our students. We consider English as third language as it is assumed that students do experience the language in a very limited sense: they do not get opportunity to learn and use English grammar in daily conversation or use.

Future plans

One of the writers of this article commented that NCERT textbooks appear difficult at the beginning, but with time show the way to move forward and we all agree. For the next academic year, we will

focus more on thematic units for the textbooks, prepare multiple teaching units of classroom transaction as well as a list of TLMs required for transacting lessons in the classroom, all in keeping with NCERT learning outcomes.

Acknowledgements: We thank Kharul Nisha, Kalpana Panwar, and Alpana Mahor as collaborators and our students for helping us to experiment and learn.

References:

1. Black, P. and William, D. (1998). *Assessment and Classroom Learning*. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7-74.
2. Dewey, J. (1923). *Democracy and Education*. USA: Macmillan.
3. Freire, P. (1968). *Pedagogy of the Oppressed*. New York: Seabury.
4. Government of India (1992). *Learning without Burden: Report of the national advisory committee*. New Delhi: Ministry of Human Resource Development.
5. Government of India (2009). *The Right of Children to Free and Compulsory Education Act 2009*. New Delhi: Government of India.
6. Kumar, K. (1988). *Origin of India's Textbook Culture*. *Comparative Education Review*, 32 (4), 452-464.
7. NCERT (2006, 2007). *Textbooks of Class I and II*. New Delhi: National Council of Educational Research and Training.
8. NCERT (2005). *National Curriculum Framework*. New Delhi: National Council of Educational Research and Training.
9. NCERT (2017). *Learning Outcome Indicators for Elementary Level*. New Delhi: National Council of Educational Research and Training.
10. Shome and Natarajan (2013). *Ideas and Attitudes towards Projects and Changing Practices: Voices of four teachers*. *Australian Journal of Teacher Education*, 38(10), 64-81.

Saurav Shome is presently associated to Azim Premji School. His current research work include project based learning, teacher professional development, and science & technology education. He may be contacted at saurav.shome@azimpremjifoundation.org

Archana Dwivedi is teaching science and English at Azim Premji School for the last one year. Before joining Azim Premji School, she taught science in Kendriya Vidhyalaya for five years. She is interested in making TLMs for students. She may be contacted at archana.dwivedi@azimpremjifoundation.org

Monu Kumar teaches at early primary stage. He also teaches Sanskrit at upper primary level. He is interested in SUPW and physical education. He may be contacted at monu.kumar@azimpremjifoundation.org

Pramod Kandpal teaches at early primary stage. He is interested in library work. He may be contacted on pramod.kandpal@azimpremjifoundation.org