

THE TEXTBOOK AS MOTIVATOR OF TEACHER DISCOURSE

RVEC Conference for Elementary School Science Teachers, June 2-3, 2017

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"The primary objective of the conference is to provide a common platform for teachers to come together and share their joys and angst. We hope this will provide teachers with a much needed impetus to form their own collectives to frequently meet and take charge of their own professional development."

- Dr. Mythili Ramchand, Director, RVEC

Panel questions

1. Why is it important for a teacher to critique textbook? What are the subject based criteria that she can use to critique a textbook?
2. How will a teacher ensure that children learn the essential elements of a subject despite the textbook not being adequate?

Way ahead:

The textbook is not a problem. It is a solution.

Textbook as a resource

Textbook as generator / motivator / focus of teacher discourse

Hence textbook as impetus for a teachers' collective

A basis for critique

- Reading
- Classroom practice
- Observations on students
- Reflection
- Sharing

Hence generation of a discourse

- that may lead to a critique –

of the textbook but also of teacher expectations, teaching practices, assessment methods, etc.

Example - Small Science

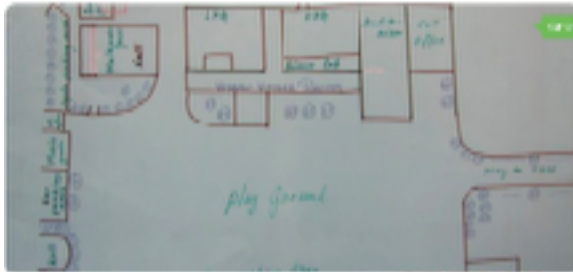
'Small Science' is a series of innovative primary science books developed by the Homi Bhabha Centre for Science Education. 'Small Science' builds on the natural curiosity of young children. Moving away from rote learning, 'Small Science' develops skills of systematic observation, analysis and articulation.

<http://smallscience.hbcse.tifr.res.in/>

Teachers' reports

- By
 - Chapter
 - Topic
 - Lesson
 - Activity
- Or
 - Issue (e.g. Inquiry)
 - Initiative (e.g. Documenting resources)

'Small Science' - 'View from the Classroom'



VEDAVALLI VIDYALAYA, 'AMILNAD' / VIEW FROM THE CLASSROOM

Trees of Vecavalli – Ranipet

Trees of Vecavalli – Ranipet: Campus A team of four teachers, Ms. Kesavaariya, Ms. Indhumathi, Ms. Divya and Ms. Sheela, the head teacher, along with aunty Raniamma, carried out the documentation of the...



AL QAMAR ACADEMY, CHENNAI / RESOURCES / VIEW FROM THE CLASSROOM

Sky watch

Al Qamar Academy, Chennai, Grade 4 September – October 2016 Small Science – Class 4 Unit 1 – Sky and Weather Chapter 2 – Day sky, night sky Sky watch Our class has been...



RESOURCES / VEDAVALLI VIDYALAYA, TAMIL NADU / VIEW FROM THE CLASSROOM

Food in our bodies – 1

Vedavalli Vidyalaya, Walsajpet, Tamil Nadu Class IV (I), September 2016 Small Science – Class 4 Chapter 9 – Food in our bodies Food in our bodies – 1 I am very excited to share...

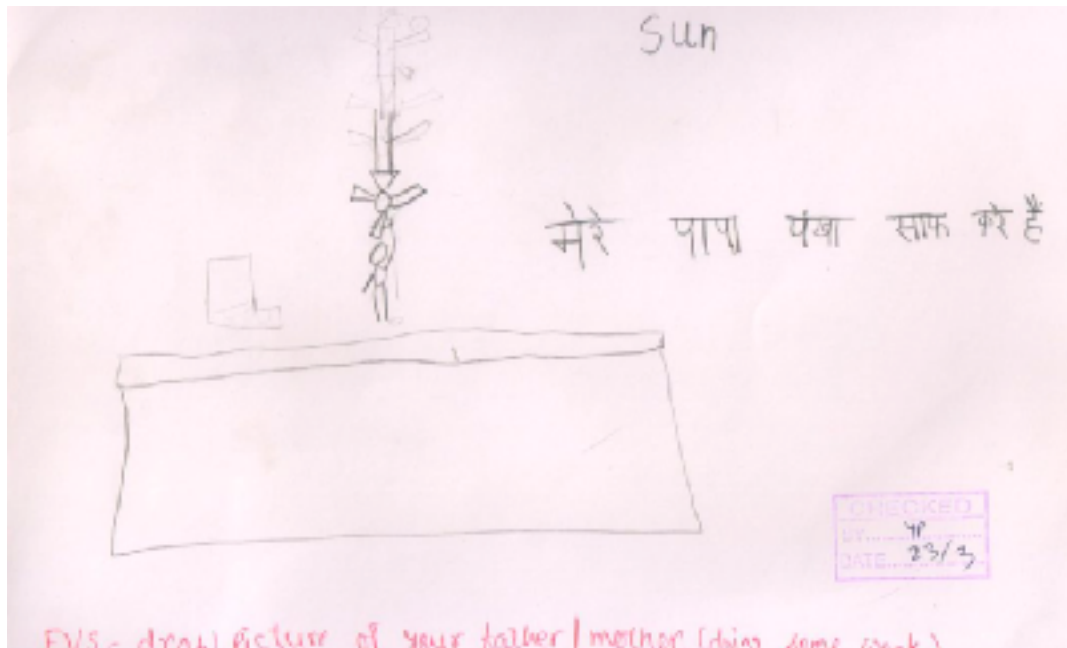


AL QAMAR ACADEMY, CHENNAI / VIEW FROM THE CLASSROOM

Tawny Coster

Al Qamar Academy, Chennai, Grade 3 August 2014 Small Science – Class 3 Unit 1 – The Living World Tawny Coster Only when the first butterfly emerged and spread out its handsome orange-brown spotted...

Sharing observations



Picture 2: A simple and charming observation of daddy cleaning the ceiling fan on a Sunday – ‘Sun’ written on top to denote Sunday. The child is surely enjoying learning Hindi and has written an extremely good caption given his limited literacy skills.

Sharing experiences

What is a flood? Have you or your parents seen a flood? Have you heard of floods in other places? Where and when did these floods take place? What was the reason for the floods? What happened then?

*The water came UP.
The water came up in the house.
I gon when the boat come.
The frige is ling down.
Then my house was date.
The sofa is ling down.
My dad push the boat.
My dad walk in the water.
Then my dad in the water.
In my house there was so many water.
The helicopter came and gave food.
In my house the water came up to my dad nak.*

(ShS, Boy, Grade 4)

<http://smallscience.hbcse.tifr.res.in/reflective-responses-on-weather/>

Sharing experiences

The next activity called for scraping some potato into water and holding a dilute mixture of starch and water in the mouth... I had a feeling that this activity would be messy and unpleasant to do... So I skipped it and went ahead.

Later I read about the experience in Al Qamar Academy and thought I must try this activity. I expected that such young kids would not have the patience to do it, so I decided I'd have to do it myself. Three months passed by and it was December before I actually got the time and motivation to introduce the activity in class. I was startled and happy when ALL the students cheerfully waved their hands and volunteered to do it.

<http://smallscience.hbcse.tifr.res.in/food-in-our-bodies-1/>

Sharing surprises

Although the activities in these chapters are simple to carry out, we are continually surprised how much of a challenge they are when it comes to thinking through while doing them... students' conviction that two half cups of water may add up to less (or more) than one cup was difficult for us to counter, and it did not help that in the experiment of adding the water we probably made an error in checking the meniscus. Repeating of the activity was preceded by much anticipation and students were at least a little surprised at the outcome.

<http://smallscience.hbcse.tifr.res.in/how-many-how-much/>

Sharing frustrations

As adults and educators, when we see the Small Science Workbook, we are thrilled. This is exactly what we've been looking for — challenging questions demanding reflective responses. However, we are in for a rude shock when the students' reaction to the workbook is diametrically opposite. While they love the curriculum, thoroughly enjoy the activities and often remember their experiences and observations later, most students balk at the workbook. Some students simply ignore the work, others do a shoddy job in completing answers — giving laconic, unreflective responses, using large handwriting to easily fill lines, skipping questions, etc.

<http://smallscience.hbcse.tifr.res.in/from-inquiry-to-learning-1/>

Role of the Textbook

- Sets shared goals
- Provides common reference point
- Focus for discussion
- Objectives and assessment criteria
- Structures the discourse

Building a professional identity

- Begins with a common cause
- And a shared discourse

The textbook is only the beginning

Thank You!