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Storytelling as a Pedagogical Approach

Editorial Committee

Prema Raghunath, Chief Editor
Azim Premji University
Survey No. 66, Burugunte Village
Bikkanahalli Main Road, Sarjapura
Bengaluru 562125, Karnataka
prema.raghunath@azimpremjifoundation.org

Shefali Tripathi Mehta, Associate Editor
Azim Premji University
Survey No. 66, Burugunte Village
Bikkanahalli Main Road, Sarjapura
Bengaluru 562125, Karnataka
shefali.mehta@azimpremjifoundation.org

Chandrika Muralidhar
Azim Premji University
Survey No. 66, Burugunte Village
Bikkanahalli Main Road, Sarjapura
Bengaluru 562125, Karnataka
chandrika@azimpremjifoundation.org

Nimrat Khandpur
Azim Premji University
Survey No. 66, Burugunte Village
Bikkanahalli Main Road, Sarjapura
Bengaluru 562125, Karnataka
nimrat.kaur@azimpremjifoundation.org

Shobha Lokanathan Kavoori
Azim Premji University
Survey No. 66, Burugunte Village
Bikkanahalli Main Road, Sarjapura
Bengaluru 562125, Karnataka
shobha.kavoori@azimpremjifoundation.org

Advisors
Hridaykant Dewan
Sachin Mulay
S Giridhar
Sudheesh Venkatesh
Umashanker Periodi

Publication Coordinators

Shantha K
Shahanaz Begum

Translations

Translations Initiative Team

Editorial Office

The Editor, Azim Premji University
Survey No. 66, Burugunte Village
Bikkanahalli Main Road, Sarjapura
Bengaluru 562125, Karnataka
Phone: +91 80 66144900
Email: publications@apu.edu.in
Website: www.azimpremjiuniversity.edu.in

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All opinions expressed in this publication are those of the authors and do not necessarily reflect the official policy or position of the Azim Premji University.

FROM THE EDITOR



Everybody loves a good story.

We all know the pure pleasure of listening to stories as children from our (mostly) grandparents. So, what is it about stories that has such fascination for every generation? We want to hear certain stories again and again and get thrilled, excited, sad, happy. We also want to go over what might have been, how we would have changed the ending or what the characters did or said and whether we agreed or not.

Children, particularly, love stories for the same reasons as adults do, but in storytelling, as in everything else to do with children, there is great commitment, involvement and participation. When children listen to a story, they listen with total absorption, sometimes tripping up the storyteller if they leave out or change a detail! And if the same story is retold another time, there are comments of 'But last time you said...'

This being the case, storytelling has become a very popular medium in schools today, in the pre-primary classes, firstly, as a means of organising the world for young children. Take the story of the thirsty crow, for instance. Crows are such a familiar sight in every part of the world that no description is required. So, the recounter can plunge into the story straightaway. At first, children wonder how a crow can be the main character of any story. But a thirsty crow? No one knew that birds felt thirsty. Lots of comments arise from this exciting fact- they fly so much; they must be getting thirsty like us. This crow can think as well - the water level being low, can be raised if heavy objects are systematically added to the receptacle: the crow finds stones and drops them in one by one. There are lots of mini-lessons in the whole process, but perhaps the most important ones are that patience pays and also that all living creatures are like us, we have to share our resources, and that (perhaps later) we have to share our planet with them. A teacher/

storyteller can bring out all this through discussion and participation.

This brings us to our theme - *Storytelling as a Pedagogical Approach*. It was chosen because stories and storytelling are too valuable a tool to be left out of the classroom. So much is taught and learned and there are so many interpretations of the same experiences that it is one of the most versatile mediums to teach other subjects, along with the skills of listening and reflecting -- talents required for lifelong learning.

We have in this issue articles that demonstrate how storytelling can be used to great success in subjects as diverse as maths, physics, social studies and inclusion in schools everywhere – urban or rural. Three articles show us how a single story can be used as a means of learning, others describe how a discussion can be skilfully used to arrive at some really important understanding of, for instance, maths – trying to discover great-grandmother's age is a case in point. And there is a wealth of stories in the Indian languages, waiting only for us to use them.

All this adds up to a channel of exchange that cuts across age groups and backgrounds and finds common ground in the magic world of stories. We hope you will enjoy this spread and find it useful in your classroom.

One final word to our readers, who might notice that the appearance of the issue has undergone a change, a decision taken after a lot of thought. However, the quality of the content remains the same, as does our commitment to engage. As always, we welcome your feedback at the email id given below.

Prema Raghunath

Chief Editor

prema.raghunath@azimpremjifoundation.org

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How Stories Nourish Children

Valentina Trivedi

In our rapidly changing and unpredictable world, it is imperative that we have the right tools to lead a happy and successful life. It may come as a surprise to many that the most fundamental of such tools can be acquired by simply engaging with stories. Telling stories has been a way of life in all cultures as the most elementary way of imparting not just knowledge, but wisdom too. Unfortunately, the increasing burden of academic course content slowly edged it out as the most basic tool to facilitate learning. As complicated curricula made schools more teaching focussed, the gap in learning due to the disconnect with stories became wider. The focus on using storytelling as a tool was recently revived by its mention in the NEP, which says that learning should be, 'Holistic, Integrated, Enjoyable and Engaging.... The aim of education is not only cognitive development, but also building character and creating holistic and well-rounded individuals equipped with the key 21st-century skills.'

Seems like a tall order? Not really, if you ensure an ongoing engagement with stories. There are short-, medium- and long-term benefits of it. Interestingly, even the short-term benefits open the doors to medium- and long-term ones!

Storytelling fosters belonging

When talking about stories, we cannot ignore the huge relevance of folk tales. People understood the value of stories and that is how wisdom was passed down through generations, through the medium of folk tales, myths and legends. These inculcated a

sense of belonging as well as attitudes of inclusion, sharing and understanding other cultures, both the differences and the similarities.

Children are most likely to be impacted by stories of an environment which they are familiar with or feel a proximity to. Folk tales tell the tales of their land, its people, customs, rituals, beliefs and sensibilities. Listening to folk tales of one's own land strengthens one's bond with it, thus strengthening one's identity. It provides a mooring so that no matter how high a person soars, they are never like an untethered kite, at the mercy of the winds. Listening to or reading folk tales of other lands is like a window into another culture. While showcasing the customs and beliefs of that land, it teaches one a fundamental lesson: that people all over the world are different. A child learns to accept that differences are a part of who we are as a species. Not just tolerating but respecting and rejoicing in diversity is an attribute naturally acquired through reading and listening to stories. In so doing the engager transcends 'tolerance'- a word often coupled with 'differences.'

Stories of wisdom and common sense

In India, we are blessed with a huge ocean of folktales where birds, animals, trees, mountains, kings, hermits, women and men deliver nuggets of tried-and-tested wisdom in engrossing ways. Here is an example of the immense wisdom ingrained in a short and simple folk tale which also illustrates the eternal relevance of folk tales.

The Foolish King

While walking in his royal garden, a king came upon a very pretty bird and caught it. The bird tried to bargain for her freedom, by promising the king three valuable nuggets of wisdom. When the king agreed to the bargain, she gave him these three nuggets:

1. Do not regret what has already happened.
2. Do not long for what you cannot have.
3. Do not believe that which is impossible.

The king thought the nuggets were good enough to let the bird go. The bird flew off to a perch beyond his reach and started laughing.

‘My freedom was cheaply bought’, she said. ‘Because in my stomach is a diamond the size of your fist.’ The king immediately lunged for the bird and missing, then, tried to lure her with promises of a royal life.

The bird looked at him scornfully and said, ‘O foolish king! You have already forgotten the three bits of wisdom I gave you! You are regretful after losing me. You long to have me even though now I am out of your reach. And how can you believe that a little bird like me would swallow a diamond the size of your fist and still be alive?!’ So saying, the bird flew away.

Here are some themes touched upon in this story:

- The value of freedom
- Cleverness and quick-wittedness – not losing one’s mind – even in the face of grave danger
- The fact that wisdom is not directly proportional to size, might or wealth
- The mention of a non-existent diamond leaves one wondering whether a large diamond would enrich the king more or acquiring and internalising these nuggets of wisdom would do.

There are several other strands that come to mind – cruelty to animals, respect for nature and power equations. One can come away with multiple strands of learning from the experience of engaging with a single story. And this was just one short story about one tiny bird! Can you think of any other source which carries so much valuable learning in such a small bite?!

Children encounter and begin to appreciate goodness, humour, intelligence, courage and beauty of the characters in stories, much before they recognise these qualities in the world around them. So, stories can introduce values early in a child’s life and lay a sound foundation. Dealing with COVID-19 over the last few years has taught us the value of resilience. It is not an attribute which can be taught from a textbook but engaging with stories where one comes across characters acting with resilience in the face of adversity, enables one to develop such attributes in an organic manner.

Learning to listen

There is a story about a child who eagerly looked forward to starting school. When the day came, she picked up her brand-new bag and tiffin box and excitedly boarded the school bus. However, she returned from school crestfallen and announced to her mother, ‘I don’t think you should send me to school. ‘A worried mother asked her why. The child looked up teary-eyed and said, ‘I can’t read or

write, and they won’t let me speak!’

Her simple reply speaks volumes about what we allow or disallow children to do in the classroom. We focus on LSRW (Listening, Speaking, Reading, Writing) but often conveniently forget L and S in our hurry to arrive at W. Talking in class is considered unruly behaviour, so we make the children sit quietly. Teachers who keep exhorting children to ‘pay attention’ and ‘be quiet and listen’, are seldom good listeners themselves. We do not want to listen to what children want to talk about and yet expect them to listen to us. But if we do not teach children what listening is, how can we expect them to practise it?

A very effective way to teach listening is to have storytelling in the classroom. *Listening* to stories develops the skill of listening in a natural, organic way. It improves focus, comprehension and expression, among other skills and has a direct positive impact on students’ performance in all subjects. Listening is a great equaliser too. Even a child who is not doing well academically can listen to a story without feeling inferior. It has been scientifically proven that any teaching done immediately after telling a story is better retained. Even a two-minute story told at the beginning of class will get children’s attention and improve their focus on the studies that follow. A class III teacher who follows this practice shared that by the second week of doing this with a new class, children start settling down and wait attentively for her by the time she enters the classroom!

As the skill of listening gets sharpened, other benefits show up. One is able to allow others to speak, read between the lines, and be open to appreciating other perspectives, which sets the stage for developing finer attributes, like empathy which cannot be otherwise taught. Storytelling in

the classroom and generating a conversation around the stories told develops social skills that lead to better personal and professional relationships in the long run. I truly believe that not listening is at the core of all the major problems of the world: people of different communities, different religions and different countries not listening to each other is the most basic cause of conflicts and results in ongoing strife. It is because we, as a species, are not listening to our beautiful planet that we are in the midst of a climate crisis.

What happens to the brain as we listen to a story

Why does the format of a story, where events unfold one after the other have such a profound impact on learning? If we listen to a teacher's lecture or a power-point presentation with bullet points, only the language processing areas in our brains get activated where we decode words into meaning; nothing else happens.

But when we are being told a story, things change dramatically. Not only are the language-processing parts in our brain activated, but so are the other areas in our brain that we would use when experiencing the events of the story. If someone tells us about how delicious certain food was, our sensory cortex lights up. If it is about motion, our motor cortex gets active. Most of us would have experienced the time a friend was telling us about his holiday in the hills, and we remembered our own holiday in the hills.

'The brains of the person telling a story and listening to it, can synchronize', says Uri Hasson, a professor of Psychology and Neuroscience at Princeton. This has two obvious benefits. First, listening to a story stimulates numerous areas of the brain and is a far more enriching experience than the passive one of sitting back and listening quietly makes it appear. Secondly, the story creates a bond between the teller and the listener, which lasts even after the story is over. What a wonderful aspect to add to the teacher-student relationship!

Another wonderful thing that stories bring about in young impressionable minds is that they invite thinking; thinking that is free of the burden of right or wrong answers, unmarred by the expectations of grown-ups or any laid-down rules. It allows the

mind the freedom to wander, and in that wandering, creates a scaffolding of one's own learning. When children engage with stories on a regular basis, more complex cognitive processes are set in motion and they take charge of their own learning, which then ceases to be an activity only to be indulged in in the classroom with the classic tools of textbooks and notebooks and with the purpose of passing an exam. The classroom expands to encompass their entire world and learning opens up to incorporate their experiences in the world. They set off on a continuous learning path – being lifelong learners in the truest sense of the word, fine-tuning and sharpening their skills and sensibilities as human beings. What greater gift can a teacher give?

Where to find stories

Teachers often ask me where they can find stories. We are surrounded by stories.

Moreover, you do not always have to tell a long story. You can make it up and it can be about anything at all: what a pebble said to you while you were walking to class or the conversation between two birds or the squirrels or why the leaf decided to fall from the tree. Making up stories will keep your creative juices flowing and the children will love you for telling them something fun and outside the course content. Everyone loves a story and being curious, attentive and eager is a good state of mind to be in for any meaningful learning thereafter.

Teachers should share stories from their region. To get more of these, they can ask the students to ask their parents to tell them stories of the region. Storytelling traditions of families should be recognised and encouraged before they die out completely. The gap created by a lack of good literature to engage with, is unfortunately being filled by 'news stories' that we are constantly bombarded with through TV and phones.

Folk tales from different regions of India and the world should definitely be read by and told to children. Some of the very good sources include books by National Book Trust in several Indian languages, especially, AK Ramanujan's *Folktales from India*; Pratham Books' storyweaver.org.in, an online collection of over fifty thousand stories for children in 337 languages, which is a graded collection for four different reading levels; and books by Eklavya Publications that are delightful to read and enjoy with children.

A last word

Stories present you with possibilities and alternate universes. They lead you up the garden path, dangle red herrings before your eyes, make you sympathise with people who turn out to do unexpected things and present possibilities that you had not thought of and endings you had not planned. At one level, it helps you to learn to deal more effectively with varied and unexpected outcomes in life. At another, it encourages you to see possibilities, which may not be apparent. And the most beautiful thing about developing this trait is that you are able to see possibilities in people too. For a teacher, especially, it is an important attribute to have – to not just see

your student as who they *are now* but to be able to see the latent possibilities, which will get a chance to flourish if you acknowledge those. Engaging with stories opens the doors of perception. It gets us out of our narrow-mindedness and expands our vision, our perspective and our spirit.

The ending of every story is the beginning of several others. Each ending invites you to stay curious and imagine other stories, which could begin at that point. ‘What happened to the old man?’ ‘Did the traveller set off on another journey?’ ‘Is the dragon still flying around?’ The possibilities, both for questions and imagined consequences, are endless.



Valentina Trivedi is a writer, performer and educator. Her creative work encompasses various mediums: performing, writing scripts, directing short films, editing, translating, adapting and telling stories. Passionate about children and learning, she specialises in approaching the learning process from a child’s perspective and has been invited to numerous educational forums to share her views. As a *Dastango*, singing is a unique aspect of her performance. She has worked in both, formal and informal sectors. She can be reached at storyweaverval@gmail.com

Meaningful Conversations Through Stories

Dhruva Desai

There is an assumption amongst educators, and perhaps adults in general, that children are ‘innocent’ and should be ‘protected’ from some of the harsher realities of the world. These can include deeply personal feelings, like grief, loss, and anxiety, as well as certain structural issues, like caste, class, gender or race.

As a teacher in different spaces over the last 10-12 years, I have seen largely two kinds of behaviours from teachers to ‘thorny’ issues, such as caste and gender. One is the kind of common, overtly-bigoted response that is still the norm in most parts of Indian society – from comments, such as ‘why do girls need to study maths’ to behaviours, such as beating a child from what is considered a ‘lower’ caste for drinking water from the common tap. The other is a kind of ‘elevated avoidance’ response where teachers feel that the way to eliminate bias from classroom spaces is to pretend that inequalities do not exist. Illustratively, this can be a statement, such as, ‘This is a gender-equal space; we don’t talk about gender inequality as that will introduce students to the idea – everyone here is kind to each other’. This is perhaps a well-meaning attempt, but it does not represent the reality of the everyday experience of discrimination, prejudice and bigotry that minorities and vulnerable communities face. There is also a cultural reproduction that takes place when we do not actively work towards changing an existing situation; by this I mean existing structures and forms persist and recreate themselves. When we do not openly address the casteist notions that are present in existing generations, there is a high likelihood that the next generation will repeat those patterns and hold the same notions.

As teachers in such spaces, we have a responsibility to make these, often invisible, experiences visible, as a first step in a process that builds towards addressing the inequalities that create these experiences. And eventually – in an ideal world – learning to question and then eradicating the prejudices that these behaviours stem from.

An attempt to address this

I had the good fortune of spending many months looking at the work done in the area of understanding prejudice and studying the attempts that have been made to reduce prejudice in schools and other institutional settings. From the work of various social psychologists and sociologists, I kept returning to the work of Gordon Allport. His research indicates that *contact* between members of different groups under certain conditions could go some way towards reducing the prejudice the groups hold towards each other. This can take various forms, such as inclusive classrooms, workshops or theatrical productions. However, as teachers, there are certain practical factors that we need to consider.

For one, we work in specific settings; it is impossible to force ‘contact’ between members of different groups in our classrooms if those groups are not already present in the immediate area. I currently work in a small village school with a very specific population – there is religious and linguistic homogeneity, but diversity in terms of caste and gender. In this situation, I cannot force conversations among, for example, Muslim, Hindu, and Christian students for the simple reason that there are only Hindu students in the classroom.

There are alternatives, as mentioned above – workshops, after-school sessions, etc. However, there is rarely time to do much extra-curricular work, especially in the face of pressure from parents who have academic aspirations for their children and a pedagogic and administrative set-up that prioritises examination performance. There are also limited resources in most school spaces, which means that several of the alternatives are outside the reach of most teachers.

Taking all of this into account, I chose to work with ‘extended contact’, that is, I try to generate contact through media – exposure to people from other cultures and groups via stories that the students can immerse themselves in. I worked with picture books and children’s literature – while this is a resource

that could require some expenditure, the relative expenditure is much less than, say, laptops and tablets, or a projector. Also, this is a resource that never expires or needs upgrading or maintenance. Additionally, picture books and children's literature (and any activity using them), in general, contribute to the 'curricular' goals of language instruction as well.

Some experiences

Over the last year, I have used two or three periods a week with classes III, IV and V to read aloud various picture books to the students and use them to start conversations about issues, such as caste, gender, religion, loss, and more. This year has been extremely rewarding and has resulted in some meaningful conversations and raised several important questions. But before getting into some of the highlights from this experience, I would like to focus attention on some of the unique benefits of using stories and books for a project like this.

Picture books fulfil a specific requirement when it comes to the attention span of younger students. They demand a certain focus and attention – different from watching something on a screen – where some of the work has to be done by the listener/reader. This skill of focus and learning is a building block for establishing the skill of self-learning which is still relevant in classrooms and our educational system. However, they do this in shorter spans than textbooks, because with language that is age-appropriate, picture books with images both grab the attention of the reader as well as contribute to the storytelling itself. The combination of text and image gives the reader visual cues and context, but still leaves scope for imagination. It encourages the reader to immerse themselves in the story, rather than simply receive it passively.

By using a series of picture books, I was also able to engage consistently with issues such as gender or caste, that require great consistency and commitment without children feeling bored.

Further, reading a storybook allows us to pause at certain points, to allow discussions to go on while referring to the book or images in the book. We can move back and forth within the story and easily refer to things that have happened previously, without breaking the flow of the story, in a way that perhaps is not always possible with other forms of media.

Instances from our classroom

While reading a story called *Mera naam Gulab hai*, in which a group of boys is teasing the main character – Gulab – because of her father's profession (a sanitation worker), it came out in the conversation in class V that one student teases another by twisting his surname (an indicator of his caste). Some of the boys on hearing the story, remarked how similar it was to how this student was being teased.

In this instance, no particular ill-will was meant by the boy who was teasing, as to him, this was simply another form of banter that they all engaged in on a regular basis. However, the student on the receiving end had been taking it to heart but had not felt empowered enough to speak up.

These issues – caste and gender-based inequalities – are lived realities in all the students' lives. In some cases, and for some students, they are extremely aware of this reality. Even where they are not consciously aware of these issues, they still hold power in their lives. By having this conversation in the classroom, not only was I able to talk about caste, but I was also able to understand a classroom dynamic that I was not aware of and take certain steps that led to the victim of the teasing feeling more comfortable, a factor that also noticeably changed his confidence and, subsequently, his performance in the class.

Insights from storytelling

We learn so much more about our students' lives by engaging in storytelling – stories are relatable and bring to the fore much more of our inner landscapes than the textbooks we conventionally use. To take another example, in a story we were reading, called *I Will Save My Land*, the main character, a young girl, interacts with her father and grandmother, but there is no mention of her mother. Many of the students asked about it – where must the mother be, etc. I encouraged guesses but did not offer any certainty in the matter.

After we finished reading the story which, to me, was a story about gender, caste and land, one of the students in the class told me with tears in their eyes that the 'mother is a bad person for leaving her child and going away'. Since we had never concluded what had happened to the character's mother, I was surprised by my student's vehemence. After class, I spoke to the student and learned that the student's mother had been working in a different district for the past few months, and the children were

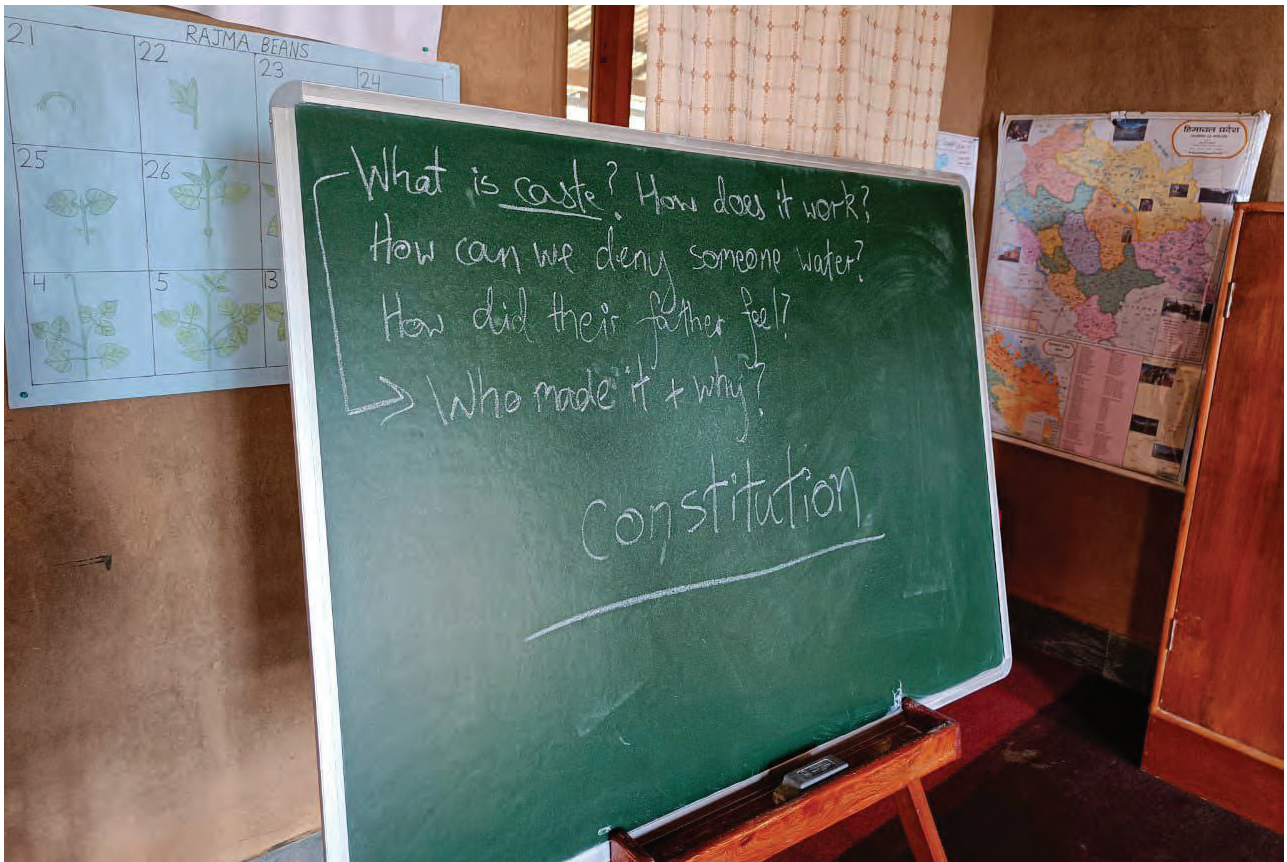


Figure 1. Some of the questions and insights that came up during class

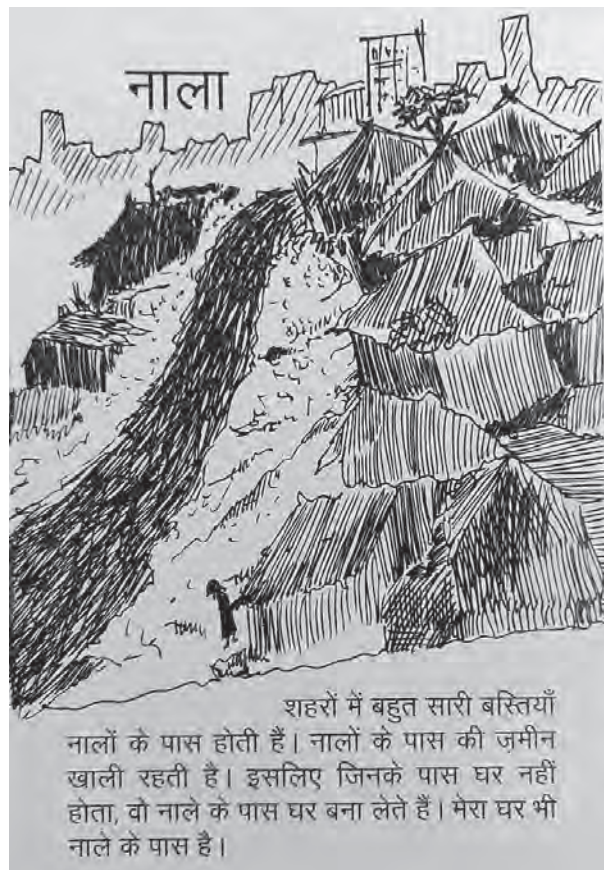


Figure 2. Naala, Muskaan, Padho Rakho Shrinkhala

feeling very lost and abandoned at home. This was something we, the teachers, had neither known or heard of, nor had we thought about the impact it could have on the children.

This pain the child was feeling had been making itself known in various forms, such as a few violent outbursts on the playground that we had been addressing in entirely wrong ways until then. It is not that this revelation immediately led to a successful resolution for the child, but it did help us support the child better.

There is also the undeniable fact that sensitively-chosen stories encourage an opening up of the mind through exposure to new experiences. For example, while reading a short story called *Naala* (written by a child from a *basti* in an Indian city) we came across the experience of living next to an open sewer, and even having to use its boundaries as a toilet. All the students in the classroom expressed disgust (and were also greatly entertained by the language used in the story). But building from that disgust we were able to have a deep discussion about two alien experiences – not having a house to live in, as well as not having a toilet to use. We spent a long time talking about how certain people have to live in these extremely dangerous and unsanitary conditions, and in the case of *Mera Naam Gulab Hai*, their work is even more dangerous with no support from the authorities. We also moved into the question of who does this kind of work in our areas and in our houses. While certainly not the thrust of the story, it opened interesting conversations about architecture, geography and the social structures of our village.

Jadui Macchi, a light story meant as a break between some of the heavier stories and issues we were reading about brought out some wonderful, pedagogically-rich conversations. In this story, an old woman and her daughters set about trying to return happiness to their land. While reading this light fantasy, a girl in the class spoke up. ‘Usually, girls can’t travel so far alone, how are these girls able to do all this?’ That sparked an engaging discussion, which then spiralled into an argument, later turning into a slightly more organised debate about the amount of work girls and boys do at home. Some of the highlights of this were: learning about the laws regarding land in our district; some of the girls in class expressing their desire to do, or be, things that they felt were generally ‘forbidden’ to them; some of

the boys in class making a list of the work that all the household members do and grudgingly accepting that much more hard work is done by their mothers and sisters.

What works and what does not

Over the last year, I have found that there are certain practices we can apply in our planning and classes that lead to richer discussions and openness in classroom conversations.

I have struggled with my personal investment in stories – there are certain books and stories that have moved me greatly, and I go into class with heightened expectations of the impact that a particular story will have on my students. More often than not, that story does not generate the response I ‘want’ from the students, and that affects my ability to engage fairly with the group. Keeping a certain distance, and allowing students to express boredom or dislike is, over the long term, a key component of constructive conversations. This does not mean that there is no exchange in those cases – the conversation can be about what they liked or did not like, and I as the teacher, should also feel free to express what I like and why but without trying to convince my students because, due to the power imbalance between students and teachers, that will invariably lead to less sincere responses from at least a section of the group that will tell me what they think I want to hear.

One of the main factors to keep in mind while attempting this pedagogy is the choice of stories/storybooks. The language must be age- and level-appropriate, especially if children are reading the story themselves. If it is being read out to them the level can be higher because explanations can be given but too much complexity and too many interruptions to explain non-essential things take away from the experience of listening to a story. More importantly, the content and context of the story need to be relatable.

We need to find stories that straddle the line between being a mirror of the reader’s own life and experience and a window into new worlds. Publishers like Muskaan and Tulika Books have several titles that are set in various Indian contexts that are more relatable than those by foreign publications. Even when the right story is not available it is our responsibility to teach our students to read both with and against the text.

The teacher needs to make an effort to integrate lighter stories with the heavier ones (on complex issues, like life, caste etc.), which can keep alive

the spirit of criticality and questioning, as well as dialogue and reflection.

References

I Will Save My Land, written by Rinchin, illustrated by Sagar Kolwankar, published by Tulika Books

Mera Naam Gulab Hai [My Name is Gulab], by Sagar Kolwankar, published by Tulika Books

Naala, written by Shivani, illustrated by Kanak Shashi published by Muskaan Publications

Jadui Macchi, written by Chandrakala Jagat, illustrated by Shakuntala Kushram, published by Tulika Books

Publishers of Indian Children's Literature

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Dhruva Desai has been teaching in schools of different kinds in different parts of the country for a few years now. He is currently associated with the Interest Group for Dialogue, Fraternity, and Justice, based at Azim Premji University. He is interested in picture-books, and sports and games, both for himself as well as his students. He may be contacted at dhruva.desai13@apu.edu.in

Telling Stories Through Art

Abhilasha Awasthi

Stories interest children and help them enter the world of the characters effortlessly. When art is chosen as the medium for telling stories, it can deepen this process and leave imprints that help children stay with the story for a longer time, since the inputs given via art are tactile and sensory. There are several ways in which children can be engaged in this process of telling stories through art.

When the child uses art to tell a story

In *figure 1*, the child is trying to tell a story via her drawing. This 'five-mouthed' (the student's term for it) pencil is visible in her drawing. Her explanation was that since this was her pencil 'tree', if one point broke, another would grow in its place – is made possible by language. The written story around this artwork now opens a door for a deeper understanding of the girl's world. It is her story, made from *her* experience of using a pencil, but

she gives it a twist by using her imagination. Along with that, the different colours used in the artwork here consolidate this imagination, bringing out her emotions and tone on paper, making this a more tangible product of her imagination.

When the teacher uses artwork to help children build on a story

When children express their stories via art, they begin thinking of words, phrases and concepts to define the story. This can be supplemented by the teacher who does storytelling in the classroom using an existing artwork. When the teacher shows a piece of art, she can ask children to talk about what they see or perceive with prompts such as: What is happening here? What are the people doing? How are they feeling? Do the colours tell you something?

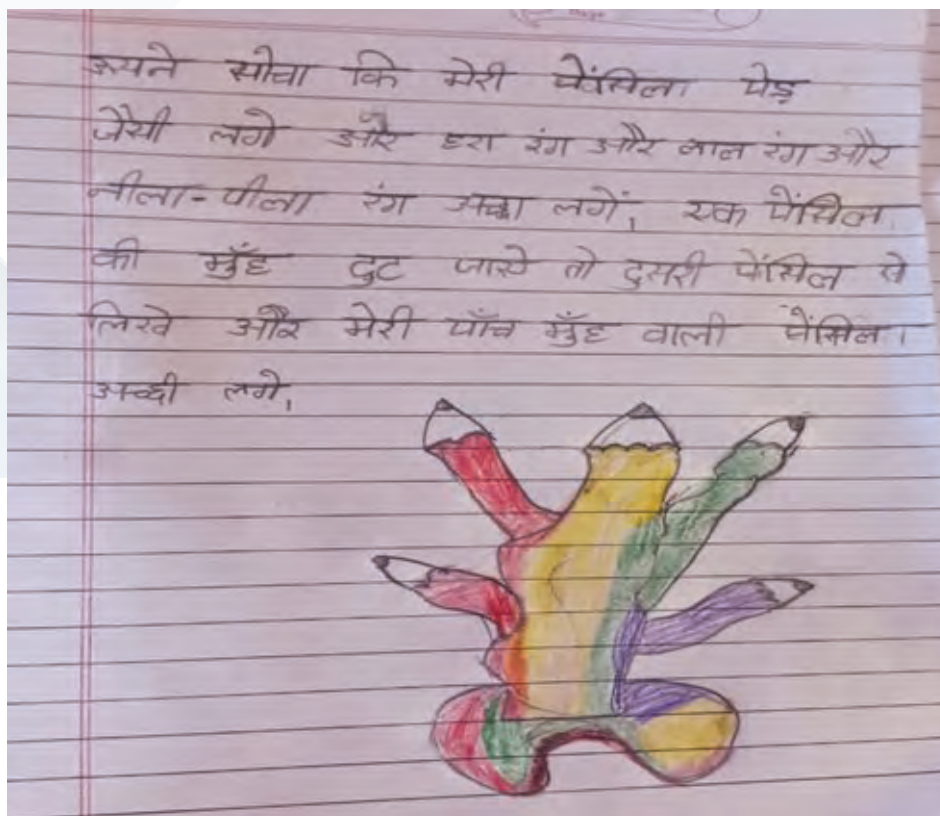


Figure 1. A student imagines a unique pencil.

Children start thinking about various possibilities when these questions are asked. There is room to build logic in the story they create, and this logic comes from these directional questions which point to the mood, sequence, timeline, etc. Moreover, this art is subject to multiple interpretations. No one is right or wrong; answers fit into a wide spectrum of possibilities, fitting into different rationales. The teacher also gives their view in this process and hence, becomes a participant in the process as well. Figures 2, 3 and 4 are students' responses to a painting with an aeroplane shown in class. The painting also had a large tree, several people, animals and birds.

Stories help us look at things from different angles. When we use an artwork to put across a story and when points of view are introduced in the story, multiple ways of using our imagination can unfold. In figure 1, we see that the child has taken a different point of view by imagining oneself as a tree. This personification makes the story more personal. In figure 2, the child mentions the feelings of the tree when the aeroplane is on the tree. The artwork by being the defaulter of interpretations here gives rise to this prospect, that is, in exploring it through multiple perspectives, several avenues for thinking creatively are unlocked.

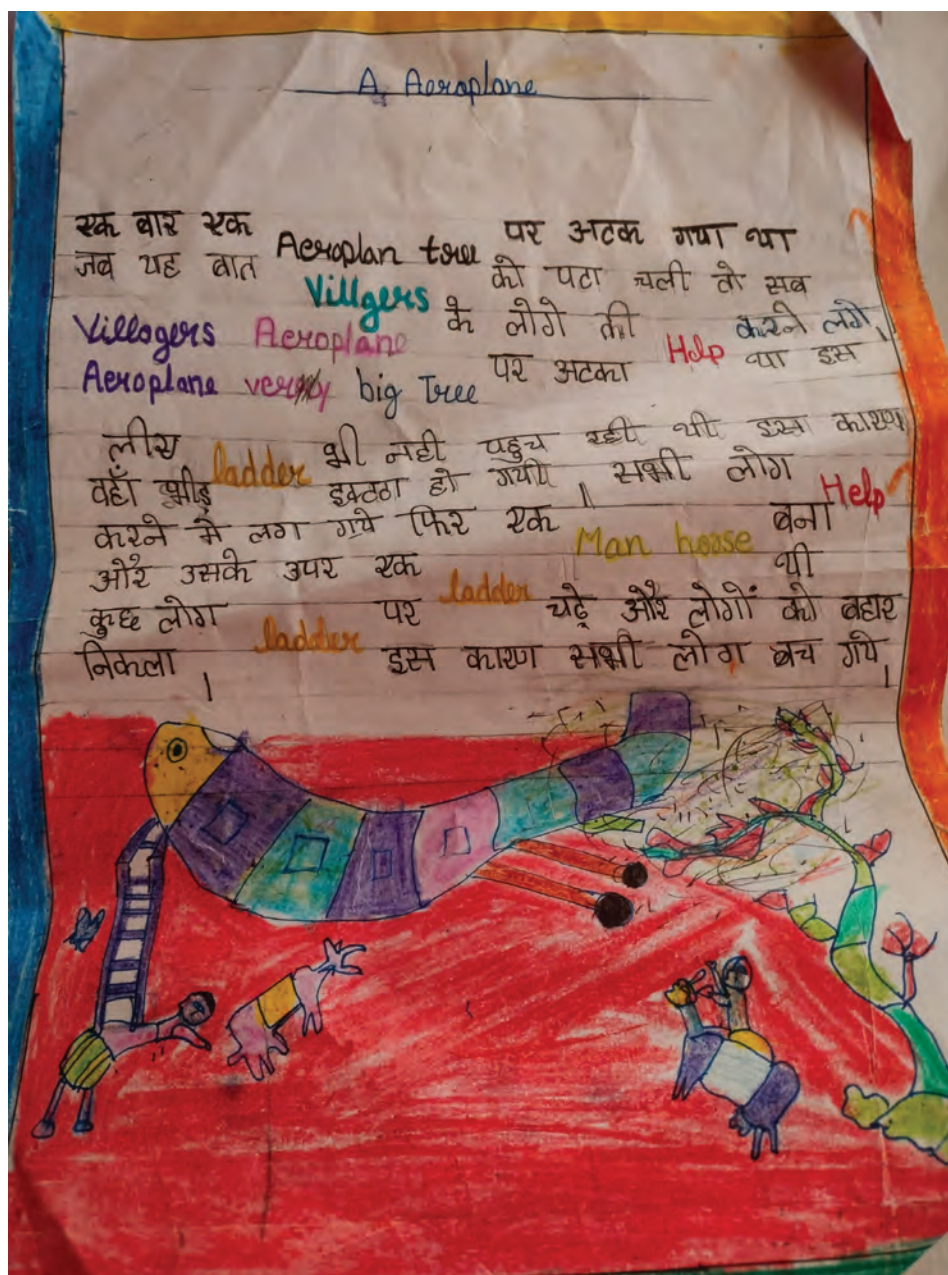


Figure 2. A student's interpretation of the 'aeroplane' painting.

These interpretations by children suggest that they are building logic in their story. *Figure 2* brings out the importance of a man-horse seen in the artwork which helped save everyone. The story shown in *figure 3* adds another character to the story, the hero, completely altering the story angle. Another element of observation noted in *figure 3*, focuses on the small elements around the picture which can modify the mood of the story. The attention to the tiny detail about the dog and the cow is mentioned which brings an element of suspense in the story. This serves as an example of the child drawing on a line of possibility around the tiniest detail. When all characters are studied at the same depth, it can open up different avenues for modifying the story and emphasise finding other possibilities for the story.

When children use art to layer a story with cultural knowledge

Children were shown the painting of a tiger, a *pattachitra* from West Bengal, in which the tiger is shown to have two bodies but one head. In *figure 5*, a child has interpreted the picture and, weaving a story around it, they have personified the tiger and brought out its struggle when it realises that it is fighting with its own reflection. Some children looked at the picture and thought that the tiger's face was made of sunflower dots, or the tongue was a lizard's tongue. These are applications of their own cultural learning.

The child's drawing (*figure 5*) brings the focus from the big tiger image to the goats. It alters the character importance visible in the artwork and the child brings their own angle here. The tendency of the tiger to eat goats is highlighted and brought in after a dramatic realisation. The title of the story reflects the importance given by the child to these characters in the story. Art, therefore, provides a possibility for recalling and applying previous cultural knowledge to form a story.

Benefits of storytelling

- When art is used as a medium, children have to rely strongly on logical thinking to construct their stories and this enhances the skill of sequencing which is a desired learning outcome.
- Art can help children look at characters or the scenario with more imaginative thinking as there is abundant scope for possibilities within that piece. This can interest the children as well as help them remember the story.
- When a child expresses their story via an artwork, the use of language becomes complementary in trying to give it a perspective. This makes it meaningful and even more interesting.
- The skill for prediction becomes more robust considering they use the indicators of the artwork – colour, technique, expression to build on the mood, tone, sequence and context of the story.

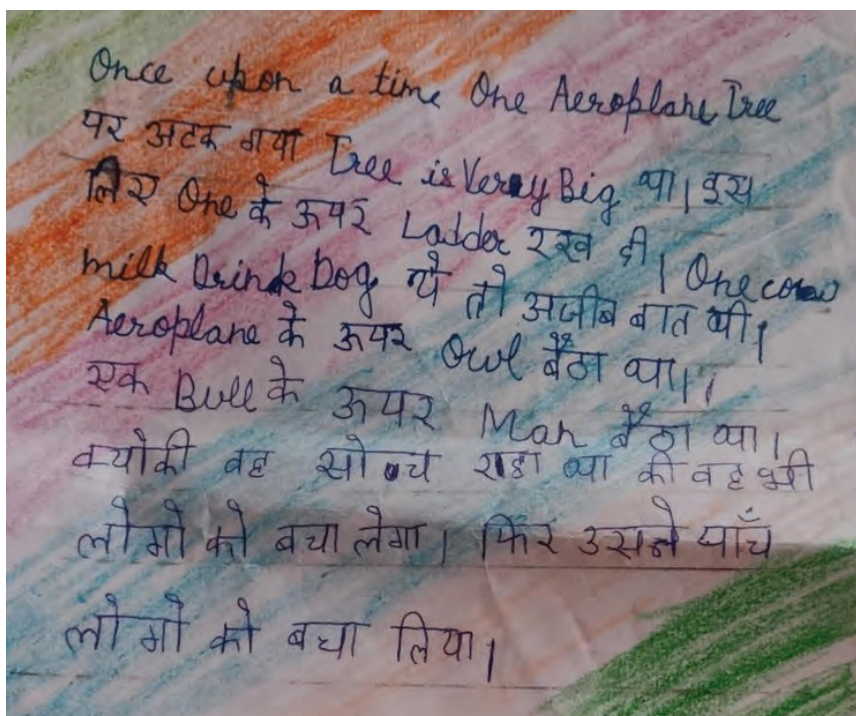


Figure 3. Another student builds a story on the 'aeroplane' painting.

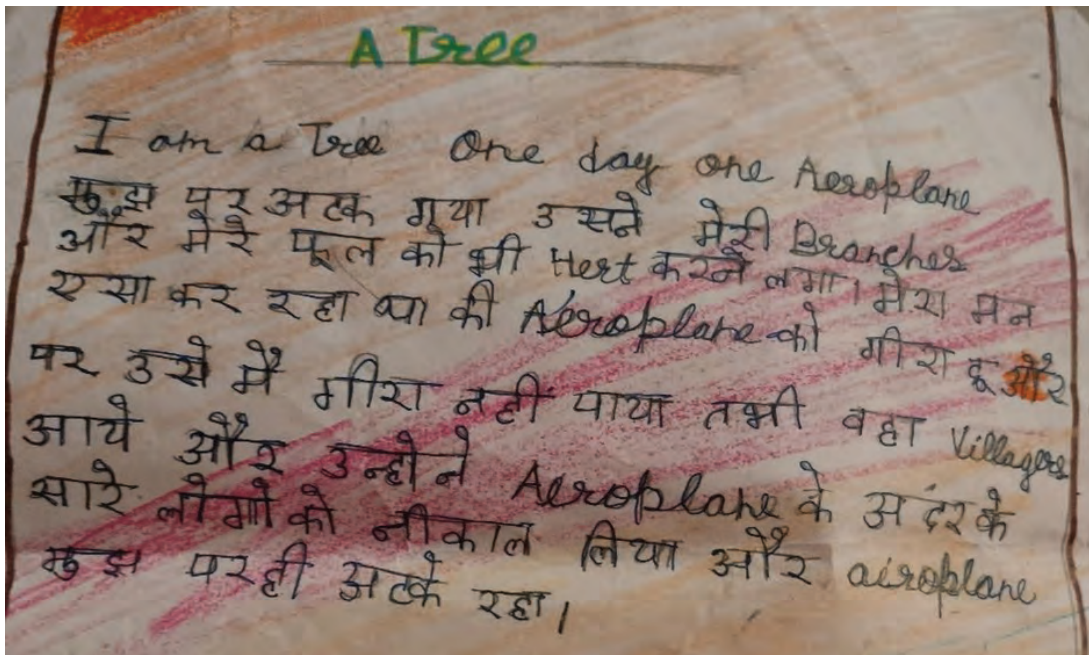


Figure 4. One more example of a student's imagination around the 'aeroplane' painting.

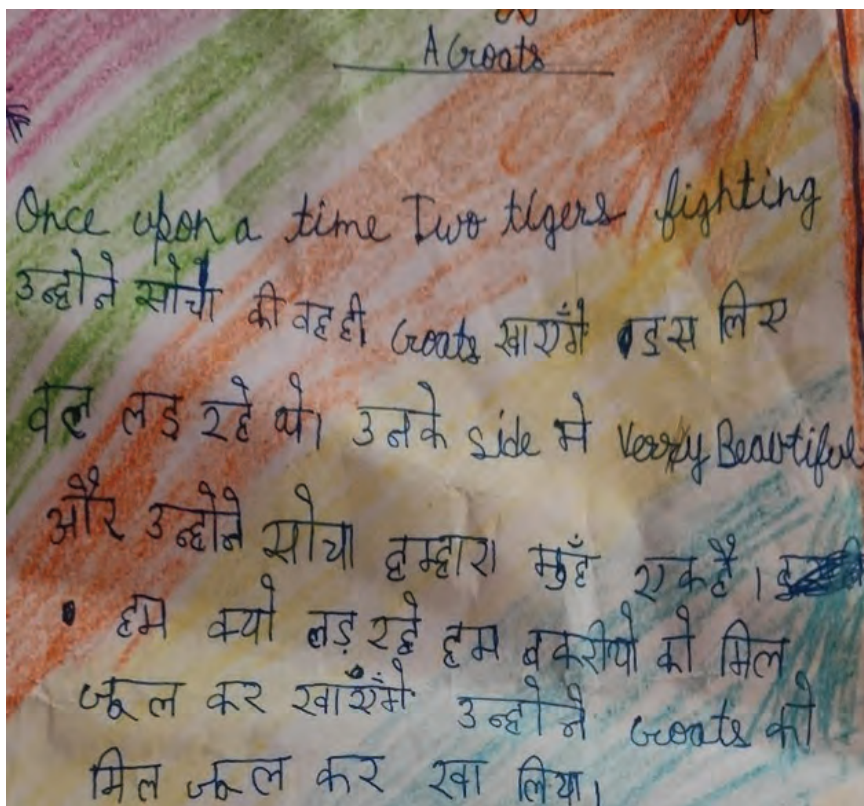


Figure 5. A student's story on the 'tiger' painting shown in class.

Using artwork in the classroom

Teachers could keep these objectives in mind:

- a. When using an artwork, children can develop on the different elements of the story – logic, setup, culture, perspectives, characters, and storyline.
- b. Interpretation of an artwork can generate a need for language.

Teaching a story via an artwork opens up wide possibilities for prediction. When children look at a painting, they can build logic by examining the various elements seen in the artwork. Some possibilities can be presented, and their logical explanations discussed. The possibilities are endless when the class begins to study the story of an artwork.

The next step could be children developing their own story using the artwork as a prompt. They need to have the vocabulary for this story, that is, names, colours, etc. From the objective of language learning, sentence patterns can be introduced into this, for example, 'There was a _____'.

Moving to the next stage, they can be given a framework to write the story on the artwork by answering questions such as the following:

- a. What is the mood of the story?

- b. What is the timeline?
- c. How many characters are there? Do they have names? Do they have characteristics?
- d. Where is the story taking place?
- e. Is there a conflict in the story? How is it resolved?

Next, they can be asked to represent the story in the form of a drawing after they have written about it. The artistic choices they make will define the elements they are trying to bring up. For example, if they show an angry turtle, they will represent the expression that way. Similarly, the colours they choose will add to the tone they have written about in the story.

In conclusion

All in all, when we use art for storytelling, it leaves a strong imprint on the minds of children, especially learners who learn better with a representation of the oral story. Using art not only provides a huge scope for possibilities but also makes space for building unconventional logic to support the ideas. Since art is a representation of a culture, children learn about pluralism and apply their own cultural interpretations to the artwork.

Acknowledgement

The author would like to acknowledge the contribution of Hema Pandey of Government Primary School, Saimdhar and Poonam Shah of Government Primary School, Biraura, who shared their students' work for this article.



Abhilasha Awasthi is a Resource Person with the Azim Premji Foundation in Almora, Uttarakhand. She likes to draw, read and travel. Her interest lies in exploring art. She may be reached at abhilasha.awasthi@azimpremjifoundation.org

Storytelling as a Method of Instruction

Gayatri

Working with Eklavya Foundation's *Mohalla Education Activity Centre* (MLAC) and government schools, we have gained some insight into how children learn languages and how we can assist them to do so through songs, stories, folktales, poems, etc. Here are some of my experiences with how stories help primary-grade children achieve expected learning outcomes, such as listening attentively and speaking without hesitation, looking closely at a picture and describing it, sharing and describing experiences based on their life and environment, questioning, reasoning, comparing. Storytelling aids in the development of linguistic skills and is an easy link to the school environment and curriculum.

Storytelling and language

When I pick up a book to tell a story, I first show children the pictures. The joy on the children's faces when they hear the title and look at the pictures is priceless. Storytelling has to be inclusive, and every child must be listened to, and their participation ensured. Otherwise, their enthusiasm will quickly fade.

Since discussing a story gives children a wonderful opportunity to use language, showing children pictures, talking about them, asking questions, and listening to their experiences that are similar to those in the tale are crucial elements of language development. It has also been noted that when all the children in the class talk together, even children who hesitate to express themselves feel free to speak.

Folktales are particularly suitable for children since they represent everyday life, necessities, nature and struggles and children can relate to their own environment. Children from classes I to III in a primary school in Hoshangabad were told the story *Shaljam* (Turnip, Eklavya), a folk tale with beautiful illustrations. I showed the children the pictures and asked them what they saw. Trees, plants, roads, houses, fields, rivers, huts, mountains, human

beings, animals and flowers were some of their responses. They even named the flowers: *gainda* (marigold) and *shevanti* (chrysanthemum). As all the children were speaking, a class I child joined and pointed out three small birds that no one else had seen.

Introducing a story

Before beginning a story, I find it useful to discuss all the issues related to it because in this way, we can introduce the children to numerous things in their surroundings while narrating the story. Along with this, children's experiences can be included in the classroom, and work that follows (including discussions and activities) can be focussed on the ideas offered by them.

When I asked, 'Has anyone seen a turnip, and how does it look?', many children raised their hands. Some children thought it looked like an onion, others said radish or carrot, yet others said cabbage, and a child stated it was purple, like brinjal. Another question arose from this: Has anyone noticed the turnip growing? Two or three hands went up. 'Under the soil,' remarked Aryan from class III. I asked what else grew underground. Carrot, radish, groundnut, and that thing...which is red like blood, yes... the beetroot, potato, onion, garlic, the children exclaimed in unison.

'Tell me, have you ever eaten turnips before, and how did you eat them—raw or cooked?' And I discovered that very few children had eaten turnips. According to one child, it is chopped and eaten with roti. Another had eaten it raw as part of a salad. A third child stated that he ate it in the form of a curry. Another child told us that his mother had made turnip and pea pickle and they ate it with *dal-chawal*. This led to a discussion. My final question was, 'OK, tell me which pickles have you eaten?'

The children began talking about mango, lemon, gooseberry, chilli, jackfruit, fish, and turmeric pickles. Continuing the conversation, I added that I had eaten garlic, ginger, mushrooms, red chilli, *karonda*, and a mixed pickle with carrot,

cauliflower, turnip, and peas. Since the children were not familiar with *karondas* (small, sour berries), I *Googled* it and showed them the plant and fruit.

We had not even got close to the story until now. The talk had focused solely on the turnip. I showed the children all the pictures in the story one by one and asked them to figure out the story. The children chatted a lot about each picture and the vegetables shown growing. They observed each picture carefully- a milkman, a girl turning on the tap, the grandfather watering the field, the grandmother collecting vegetables in a cart and so on.

As we turned the pages, we came to the part where the grandfather calls the grandmother because he is unable to dig up a turnip on his own. Since she too is unable to pull it out, she summons the girl. When I asked if the turnip would come out now, the children responded in the affirmative because, they said, the girl is stronger than her grandparents. A child told me that even in her home, her father could move items that her grandfather could not. However, when the youngsters saw the picture on the next page, they concluded that the turnip had still not emerged. Perhaps a lot of strength is required since it is firmly rooted, they said. They noticed that the mule, hen, and chicks were laughing at the scene. Next, the girl summons the mule, who catches hold of her plait to help in the pulling of the turnip. One by one, all the animals on the farm joined the task of pulling out the turnip. They clutched each other fiercely till the turnip finally emerged.

All the children burst out laughing because they were having so much fun looking at the picture where everyone falls on each other when the turnip comes out.

I asked them how a small mouse could pull out a turnip when so many others could not. One child thought that the mouse had nibbled at the roots, which was why it finally came out, or perhaps it was helped by a friend.

Even without narration, by just looking at the pictures, our story ended here. However, I re-enacted it with some children dressed as the story's characters (the turnip, the old man, the old lady, the girl, the mule, the dog, the cat, and the mouse). The children enjoyed watching the story unfold in front of their eyes. According to the

narrative, everyone eventually fell on top of each other and began scuffling on purpose.

Using questions to aid thinking

Did they have any questions or concerns about the events in the story or the ending, I asked the students. This helps to find out what their thoughts are after hearing the narrative.

This form of conversation on stories, I believe, opens up many dimensions of the language while also allowing us to touch on numerous topics at once. Exchanges with the children, on what they liked or disliked about the narrative, such as which parts of the narrative they did not like, or what could be improved, increases participation. The impact is palpable. As seen here, the children made a spontaneous attempt to think of and express a line at least on practically every picture.

Using storybooks optimally

In our experience, the main challenge for teachers is determining when and how to use storybooks since they are constantly under pressure to complete the syllabus. Teachers suggested that we come to their schools and do the activities with storybooks and give them ideas that they would be able to follow. We organised Reading Fairs for these schools. These Reading Fairs included activities, such as storytelling, finding the given words and pictures in books, playing snatch-the-book game by providing clues about the book (its colour, picture, name) to help children get closer to their expected learning outcomes.

The goal of this entire exercise was to demonstrate the importance of storytelling in language acquisition and ensuring teachers' involvement in activities, attempting to break their hesitation of telling a tale through gestures, talking and understanding. As a result, the next time I went to school, the children told me that they had read all the books I had given them. Some stories were read out to the students by their teacher, while some they read themselves during their leisure time. They requested us for more books. Children are now in love with storybooks!

Keeping the children's interests in mind, we can explore many exciting ways to enliven and strengthen their communication skills through storytelling. By predicting what will happen next in the story, children progressively become

acquainted with the rules of the language. Storytelling can be a highly beneficial and engaging

activity to help children learn to read in the early years of primary school.



Figure 1. Learning to enjoy a book



Gayatri has spent many years working in the Eklavya Foundation's Children's Library in Hoshangabad. She is currently working with children, teachers, and the community on the teaching-learning process in government schools in the Hoshangabad block as part of the *Jashn-e-Taleem* project. She enjoys spending time with children and writing about her experiences with them. She can be contacted at gayatri@eklavya.in

Iman Sharma

Do you remember how, as children, we loved listening to stories? Our favourite adult in the family was the one who would tell us colourful stories. Our favourite teacher was the one who would tell us stories that went beyond the pages of our textbooks. No matter how restless we were as children, with stories, we could sit for hours listening and wandering in a different world. It was as if stories would transport us to a new world of possibilities, wasn't it?

What was the purpose of storytelling? Other than to engage us by catering to our wide interest and ever-exploring minds, our adults wanted to induce some values in us. That is why most of their stories had moral lessons, often explicitly stated at the end.

Stories have attained an important place in learning these days. Storytelling is considered an effective pedagogical technique for the teaching of all subjects (not just languages), especially in the early years of school. Through the medium of stories, children learn to listen, comprehend, imagine, understand points of view and analyse and evaluate history, cultures and concepts. They develop language skills like expression, coherence, presentation, tone, intonation, structuring sentences, phrases, idioms, style of speaking and much more.

Another undeniable aspect of storytelling is that it is a constructive way to ingrain values in young children. While listening to a story, children use their conscience and experience to judge a situation and/or a character and develop their own values and understanding of what is good and what is bad; what should be and what should not be done. As keen listeners, they develop their own perspectives on various situations. They travel across worlds and times with the characters of the stories and connect them with the reality of their lives and experiences. Even the youngest children can connect to stories, characters, and their world, just as we all did when we were children.

My experience and learnings

Looking back on the days when I engaged with children in schools through storytelling to teach my subject, the English language, I realise how I could connect with them at a more personal level too. With storytelling, I could talk to children who were shy and introverted. It made them feel comfortable enough to speak their minds and feel assured that they would not be judged. Whenever I asked them questions, such as what would they do if they were a particular character in a story and why, they would share thoughts that would amaze me. These thoughts provided me with a glimpse into their lives, their identities, their minds, and their families and homes.

Imbibing values

Many a time, I would play the devil's advocate and the children would never judge, rather they would have the most logical reply to questions on what they think is right or wrong and why they thought so. This got me thinking: Isn't storytelling like living a real situation, so much so that one is very clear on what is right and what is not? And is there any better way to make children realise this, so that they develop core values organically, and not just by mechanically mugging up answers to 'morals' in stories? Learning about life through stories will help children make better choices that influence their lives.

Valuing goodness

One of my favourite questions to children after a storytelling session is, 'Who is your favourite character?' Children always make the wisest choices. They are good at analysing a character and a situation. I have never had an experience where any child has liked a negative character. It is always the good character who takes away the trophy of being the favourite, which made me see that children are naturally inclined towards goodness, and they possess the sense of judging it. All we can do as teachers is to guide them. No matter how naughty a child is, they always declare the good character as their favourite proving again and again

that they understand the value of goodness.

Not judging others

Once when I was telling a story to a class of around 8-10 children about a girl who loved eating fish, I did not know how the children, who were largely vegetarian, would react. These children were also a little older -- 9-10 years old. To my surprise, only two or three children reacted as I had expected, but the rest were absolutely okay with the girl eating fish. Some of them even shared that they too were non-vegetarians and loved eating fish, chicken, and eggs. As I remember correctly, their words were, 'It is okay to eat whatever you want. We cannot say if a person is good or bad based on what they like to eat.' I was in awe that children could be so mature. I told them that I was a non-vegetarian too. Towards the end of the story and the discussion, all the children agreed that eating habits do not define a person. Thus, storytelling on that day helped these children arrive at a certain level of tolerance/acceptance. And I learned that stories can be a great way to help children think beyond our societal norms and provide an opportunity for us to stand in someone else's shoes and perceive the world.

For me, the most interesting thing about storytelling with young children was how they would arrive at their own understanding of the story, plot, or characters. They constructed their own values. They also felt confused by their own thoughts and in those states of confusion, most of the time, it would be their peers and not I, who had the perfect answers.

Conclusion

Storytelling can be made more interesting with the use of different storytelling methods and materials, like puppets, story cards, books (*Big Books*, picture books, etc.), big pictures, role-play, drawings made by children, videos, etc. The richer the experience, the deeper the effect. When children tell stories, it removes their hesitation and boosts their confidence to speak and express their thoughts. So, with stories, children get a window to think and reflect, they get a chance to make choices (by changing the end of a story, selecting a favourite character or part), and they become good listeners and creative communicators. All these skills are essential for life in this 21st century. And as we have seen through my experiences, stories provide an organic means to develop core values in children.

The National Curriculum Framework for Foundational Stage (NCF-FS) 2022 mentions five developmental domains: (i) physical development, (ii) socio-emotional and ethical development, (iii) cognitive development, (iv) language and literacy development and (v) aesthetic and cultural development. All these domains of development can benefit significantly through storytelling. The NCF-FS talks about 'ethics, values and disposition' as well, and as discussed, storytelling is an effective means of developing these naturally. It is clear that based on stories, a complete learning experience can be built for children, and it is time that we, as teachers, incorporate more storytelling in our classrooms.



Figure 1. Storytelling by children using stick puppets, Chittorgarh, Rajasthan

References

- Dash, D. (2015). Effectiveness of Storytelling Approach in Inculcating Values Identified by NCERT among the 6th Grade Learners of Odisha State. *Scholarly Research Journal for Interdisciplinary Studies*, 51(3), 2583-2590
- Gunawardena, M. & Brown, B. (2021). Fostering Values Through Authentic Storytelling. *Australian Journal of Teacher Education*, 46 (6)
- Koivulu, M., Turja, L. & Laakso, M.-L. (2020). Using the Storytelling Method to Hear Children's Perspectives and Promote Their Social-Emotional Competence. *Journal of Early Intervention*, 42(2), 163-181
- National Curriculum Framework for Foundational Stage (2022)
- Taylor, E., Taylor, P. C. & Hill, J. (2018). *Ethical Dilemma Story Pedagogy – A Constructivist Approach to Values Learning and Ethical Understanding*. Paper presented at Proceedings of the Science and Mathematics International Conference (SMIC)



Iman Sharma is faculty at the School of Continuing Education and University Resource Centre, Azim Premji University. She is based in Guwahati, Assam. Her area of work includes English, Early Childhood Care and Education (ECCE) and Foundational Literacy and Numeracy (FLN). She did her graduation from Cotton College with English Honours and postgraduation from Tezpur University in Linguistics and Endangered Languages. She may be contacted at iman.sharma@azimpremjifoundation.org

It is very important during these early stages for teachers to ensure that children hear, see and read what is familiar. As an example, in a classroom, what is being read in the form of a story must also support what is being discussed in circle time or during small group interactions.

Sharoon Sunny, Power of Stories in Language Learning, page 59

What Storytelling Brings to the Class

Isha Badkas

I have been developing a Comprehensive Sexuality Education (CSE) framework which is spiral in nature and advocates that CSE should be an active part of the formal curriculum right from the early years of education. My classroom engagement is with students of classes V to IX on a monthly basis in Aksharnandan School, Pune. With the older students, I try to open conversations in a more direct manner. But with class V students, the conversation needs to be planned differently. I have tried to consolidate my limited experience of experimenting with 'storytelling' as a tool with class V students; in short, this article will talk about my trial-and-error experiments with stories.

Classroom engagements: My experiences

Initiating conversations on difficult themes

Sometimes, it becomes difficult to initiate a conversation around a theme as there seems to be no suitable starting points. In such situations, stories, poems and films act quite organically as prompts to trigger conversations. In my experience, stories like *Sir Ka Salaan*, *Kyon Kyon Ladki*, *Pyari Madam*, *Barasta Tarbooz* shed light on so many complex social issues such as caste, class, religion, gender etc., by simply putting people's daily experiences in words. Picture books can help start a dialogue on complex social relationships and encourage reflection on one's feelings in a natural way. Such narratives hold special importance in urban classrooms where most of the students come from stable socio-economic families.

Building a listening space

Just as how questions open up conversations, sharing of personal experiences open up space for students to empathise/ relate with each other. Different characters from the stories sometimes offer room for students to align their life struggles with a character in the story, or sometimes they learn about different social realities of people. This representation of different lives and different voices may result in a more inclusive, accepting attitude among students.

Creating space for creativity, curiosity and reflection

Different activities and exercises can be developed with stories. Some of the activities mentioned below can be tried out with most stories by making changes suitable for the students or the context. Theatre activities, like role play, can create an environment where students can experiment to be someone else. The experience of what it feels like to be someone else enables the process to understand oneself better. These activities help in language learning, building vocabulary and finding different ways of expression.

Preparing the ground for academic discussions

Stories can bring numerous curricular connections inside the classroom. For example, while reading the story *The Why-Why Girl* many themes such as social justice, gender, caste etc came up which are directly related to social science. Such linkages can come in handy in social science classrooms because conversations can be built from references in storybooks. Narratives questioning oppressive structures in society offer opportunities to challenge stereotypes and taboos, leading to reflective academic engagement in classrooms.

Facilitator's role

I have tried making a comprehensive lesson plan for a storytelling session but have realised that such sessions are more insightful when they are spontaneous and free-flowing. I usually ask a lot of questions as I read a story which makes the process interactive. What is necessary for a facilitator is to churn the discussion, consolidate it and highlight relevant points and questions as they go ahead. Teachers and educators can try to bring in as many subject-related references as they can through the stories so that students can easily interlink experiences.

In this section, I am going to talk about my experience of reading the story *The Why-Why Girl* by Mahashweta Devi with students of class V. This story is about a 10-year-old tribal girl, Moyna, who is curious and asks the question 'why' to everything happening around her. Moyna's questions make

us think about the wonders of nature, leading to us questioning social injustice at the same time. The story opens with Moyna running behind a big snake, trying to catch it, as snakes are eaten in her family. At this point, the students were discussing different kinds of meat that humans eat. A few students were surprised to learn that snakes are also eaten.

Moyna talks about household and other chores that she has to do on a daily basis. As Moyna and the class V students were almost the same age, it was striking for them to understand that Moyna’s life was so different from theirs. One of the students said that both Moyna and Jamlo’s (protagonist of the story *Jamlo Chalti Gayi*) lives seemed so much more challenging than theirs and their experience of childhood was poles apart. Both Moyna and Jamlo have responsibilities to support their families in various ways, financial support being one. In short, many things that are easily available to my students, and which they think are available to every child, are an everyday struggle for children like Moyna and Jamlo.

The story mentions Moyna’s tribe - *Shabar* - and mentions that the *Shabar* community do not have any access to land and resources. While the community members do not have any complaints about this, it is Moyna whose questions are becoming more profound day by day, examining the unequal division of resources. Bringing up the struggles of marginalised communities is crucial in an urban classroom like ours in order to make the students aware of their privileged lives and what can one do with this advantage.

Another discussion opened up when Moyna begins to think about why they have to eat stale food given by the landowners where she works. Here students started sharing experiences of their own homes where too leftover food is given to the househelp. Some students felt that it was fair to give extra/leftover food to people as it anyway gets wasted if not given away. On the other hand, some of the students felt sorry because they understood that it would not be a good feeling to receive stale food, even if it was well-intentioned.

Some of the students had visited *Adivasi Pada* (tribal hamlet) shortly before this session, so they could immediately visualise the description of Moyna’s village. The students questioned the timing of the government school not being suitable for the students in the hamlet and expressed the view that since a school is for students, its timings should be kept considering the routine of the children. Though Moyna was asking these important questions to herself and to those around her, we as readers, start to question the inequality in access to education and other basic needs to children like Moyna.

We, then, collectively thought about: *Do we even ask ‘why’ about the things and practices that happen around us? Or do we simply accept these as they are?* Following the discussion, an activity was conducted wherein the students were asked to close their eyes and think about two questions that emerged in the moment – questions that they may have been thinking about for a while. Some responses were:

Questioning the self, the body	<ul style="list-style-type: none"> • When I got a haircut, everyone told me that I am looking bad; that I am not their friend. Was my decision to get a haircut wrong? • Can only women have babies? • Sometimes, students around me are very mean. Is this because I am new to this school?
Questioning society, gender roles	<ul style="list-style-type: none"> • Is it because I am a boy that I am not allowed to cook at home? • Why are people with dark skin considered inferior? • Why do people verbally abuse others? What do they mean when they use abusive words? Who created these words? • Who decides the skin colour of babies? • If two people love each other, why should other people care? • Is it necessary to tease a girl and a boy when they are seen together? Can’t they be just friends? • Why is it that at home, only my grandfather does the <i>puja</i>? • Why does an <i>Adivasi Pada</i> have only one school?

Fantasy- curiosity	<ul style="list-style-type: none"> • Do ghosts build their own houses? • Is it necessary to obey our parents every time? • Some people fall ill with incurable diseases. Why do such diseases exist? • Can things that exist in fantasy, take shape in reality? • What exactly happened in history? • Who steals our pens in the class?
Feelings	<ul style="list-style-type: none"> • Why can't I know how other people view this world? • Does shouting necessarily mean scolding or being angry at someone?

Activities with storytelling

There are different activities that can be tried out in the classroom with storybooks as Teaching-Learning Material (TLMs). Here are five such group activities that can open up possibilities for collaboration, creativity and questioning.

Changing the narrative

In this activity, each group is asked to attempt to rewrite the entire story from the viewpoint of a different character from the same story. Interesting twists develop through such exercises as participants 'wearing the shoes' of the new character and trying to visualise situations and interactions with other characters, viewed from different perspectives.

Guess the end/ change the end

There are two ways of conducting this activity: either the facilitator can read the story and stop at the climax and invite students to discuss the possible endings in groups or the facilitator can read the complete story and then invite students to make changes in the story, if they wish to.

Add a character and rewrite the story

In this activity, students are invited to add a completely new character to the story and write this new character's journey along with the other characters.

Act it out!

Theatre activities help greatly in the socio-emotional

learning (SEL) aspect. When students 'play' the characters in the story, they start identifying with their lives. Furthermore, participatory theatre can be introduced wherein the students enact the story and pause at a particular moment where the audience is asked to replace the characters on stage and respond spontaneously in the scene as if they were playing that character. This brings out different perspectives of looking at any given situation.

Design the cover page and title of the story

The facilitator reads the whole story with its front page covered. Once the storytelling and discussion are over, the students sit in pairs and visualise a cover page for the story based on the discussion and think about a suitable title for the story.

As is evident, storybooks are great TLMs. Reading a story definitely plays a crucial part in a classroom but engaging with them in different forms opens up different avenues. I read a lot of storybooks when I was growing up. Although we had a library period twice a week, book discussions were not included in the curriculum. This isolation is problematic as it prevents the close connection of curricular themes with the subject and plot of storybooks. I think stories have immense potential that we, as facilitators, must explore to create honest conversations, exchange of opinions and, most importantly, develop a listening ear.



Isha Badkas has been working with *Eklavya* for the past four years. She coordinates the Community Engagement and Education Programme. She completed her master's in Education from Azim Premji University, Bengaluru. Her interest lies in exploring gender and sexuality by creating spaces for dialogue. She may be contacted at ishabadkas@eklavya.in

When Stories March into the Maths Classroom

Mala Kumar

Everyone knows the story of the thirsty crow, but this one is about a crow who liked to do things differently. So, when this 'thirsty crow' needed to drop stones in a pot to bring the level of water up for her to drink from it, she started chanting:

Line up here, then you Crow 1, go to my left.

Say 'Right' Crow 2 and go to my right.

Left and right, left and right.

Get a stone each, and drop it in, right!

In this way, this clever crow enlisted the help of other crows to quench her thirst. Depending on the creativity of the storyteller, the chant could be changed, sung, or made into a chorus, letting children have fun for a couple of minutes before the discussion moves to the mathematics involved.

Storytellers like to push the boundaries and tinker with established stories to stretch their appeal or make them more relevant to a specific audience, or to use stories for a purpose. Most preschool children do not like adults to change their stories. This modified crow story may be rejected by them early in its development. One child may shout out, 'The thirsty crow was alone!' Familiarity is one of the factors that makes a story dear to children. But, thankfully, children welcome change, sometimes they even *demand* it. At some point, children are ready to trade familiarity with some novelty. If the narrator invites children to become co-creators of a new story by making suggestions, change happens organically. What would have happened if the crow was too lazy? Do you think she could have done it any other way? Could she have drilled a hole in the pot with her beak? Perhaps a woodpecker did that, a child may answer.

Teaching maths through stories

Storytelling lends itself very well to building children's communication and comprehension skills. In the language class, the teacher can encourage the students to make up an entirely new story by using the opposites of all the adjectives in the story. In science class, students could try to see if the water level really comes up if they keep

dropping stones into a pail of water. And there is much that can be done in the mathematics class.

According to a Finnish study published in 2021 in the International Journal of Educational Research, 'Focused coding around how teachers employed 'storification' in both the physical environment of their classrooms and in their teaching practices revealed six categories of describing perceptions and experiences of storified pedagogy: alignment (integration) with teaching, providing a purpose for education, atmosphere (signalling), student (mis) behaviour, accommodating student abilities and sense of transportation.'

Addition, subtraction multiplication and division can all be taught using the crow story above. Let's say 30 stones were dropped into the pot. If each crow dropped one stone into the pot, how many crows do you think were there? If only 15 crows had come, how many stones would each crow have to drop? What if there were only 10 crows?

We can also use the story to teach concepts of form and structure, matter, solids and liquids, and volume. With abstract subjects like maths and science, most learning happens by rote and not by reason. Well-told stories, however, have a recall value that allows children to learn organically.

Stories help teachers to introduce a concept, make the learning more relatable and gain children's attention to easily introduce an abstract concept. How do you teach odd and even numbers? In the *Happy Maths* series, I made up a story about an old man who had an endearing habit that his grandson catches on, and he learns that odd and even numbers do have a role in real life, at least in his grandfather's life! In *One, Three, Five, HELP*, author Kuzhali Manickavel brings in beetles, lacewings, moths, spiders and other creatures to draw attention, not just to odd and even numbers, but also to addition. Any class in which this story, illustrated by Sonal Gupta Vaswani, is

included would have young children jumping with excitement!

Start, zoom, stop!

Stories have a way of growing without our knowledge. When a teacher decides to use storytelling as a tool, it is important to keep the end in mind as also the expected learning outcome. In *Who Got the Goat?* author Aparna Athreya brings in two lovable *asuras* who fight over who can drink more *neer-more* (spiced buttermilk). Here is a story meant to make fractions fun. The characters' names and the illustrations by Shreya Sen could easily turn the class into quite a laugh riot unless the teacher stops at the right place and moves to the maths!

Once, years ago, when I was teaching class V the magic of numbers, I got pulled into the fun, perhaps a little too far. I had encouraged the students to make paper planes, write coded messages on them and fly the planes inside the classroom. Whoever received a plane had to decode the message. Delighted with the enthusiasm of the students, we carried on, not noticing that the principal had opened the door and come in. How thrilled he must be to see such a lively mathematics class, I thought immodestly. He called me out of the class and gave me one of the coldest reprimands I have ever got.

Real stories

In my experience as a storyteller, I have been able to learn and question my own early misconceptions when I tried to explain a concept using the story format. Not all concepts can be told through a story. Not all stories lend themselves well to teaching maths. Many of the stories we grew up with, like fairy tales and *raja-rani* stories, have many politically-incorrect messages for today's times and are best avoided. Should we use folktales that seem quite violent, like the one where the wolf swallows

the little girl, and the woodcutter cuts open the wolf? Such stories are best avoided.

Real stories around us have a huge potential as pedagogical tools. You can tell them with conviction, and students can see the direct connection between their lessons and the real world. Here is a news report from the mountains of Meghalaya, home to the three main tribes *Khasi*, *Garo* and *Jaintia*. Unlike most parts of India and the world, their way of life and traditions are quite different. For example, girls in this region take on their mother's family name as their surname; they inherit land from their mothers, with the largest piece of it going to the youngest daughter; they inherit the knowledge of seeds; and they climb up and down many steep, slippery steps —sometimes as many as 2,500 — between their homes and farms.

This story, full of unusual and interesting facts, can be used in the maths class to teach distances, measurement (what do you think the height of each step in this story would be?) and the need for standard measurement as also:

- Volume: What would be the volume of one handful of seeds?
- 2D and 3D: If the seeds were laid out flat on the ground, what would be the area covered with a handful of seeds?
- Division and logic: If Bibiana Rane, mother of two daughters, has ten units of land, in how many ways can she distribute the entire land to her daughters such that the younger gets more units than the firstborn?

In summary

The amount of time, work and dedication that goes into making lesson plans leaves most teachers with very little time to read or look into other people's stories that are seemingly unrelated to work.

Given below is a list of articles and videos that teachers may find interesting and valuable in teaching maths.

<https://www.sciencedirect.com/science/article/pii/S0883035520318346?via%3Dihub>

<https://www.mathsthroughstories.org/about-us.html>

<https://storyweaver.org.in/stories/51422-one-three-five-help?mode=read>

<https://storyweaver.org.in/stories/92172-happy-maths-numbers>

<https://storyweaver.org.in/stories/356934-who-got-the-goat>

<https://www.yesmagazine.org/democracy/2016/01/08/in-photos-the-seed-saving-farmers-who-pass-down-land-to-their-daughters>

https://www.ted.com/talks/uma_adwani_the_hidden_messages_in_multiplication



Mala Kumar is a freelance writer, author of books for children and a former editor with Pratham Books. She is currently also a Consulting Editor for Azim Premji University publication *i wonder....* She may be contacted at Mala.kumar@azimpremjifoundation.org

The questions asked during the course of storytelling play an important role in increasing awareness and empathy. If children are asked, what would they do if they were a character in the story, it helps and develops their thinking and problem-solving skills. For example, if the story is about dreams: What do you dream of? If the story is about fear: When are you scared of? What do you do if you are afraid? Questioning children's reactions gives them an opportunity to express their feelings and also to relate their own lives to their learning at school.

Padma BM, Learning through Stories, page 40

Storytelling Activities for Classrooms

Nabanita Deshmukh

Ongoing researchⁱ on storytelling highlights the significant improvement in the literacy skills of students who listen to stories regularly. One articleⁱⁱ states that children who are exposed to storytelling at a young age develop important abilities, such as imagination, empathy, tolerance, and inference that help them navigate through life with confidence.

Stories that are narrated with the appropriate use of gestures, voice modulation, pauses, facial expressions and props become powerful teaching aids. Teachers can then use them confidently with students who struggle to learn a new language. Stories work best when they are selected according to the age, interests, comprehension levels and background of students.

Unfortunately, in many classrooms across India, teachers mainly tell stories to impart moral values or to explain grammar concepts. For storytelling to become meaningful, teachers must narrate tales with passion and for the joy they bring to the audience. Dissecting, analysing, interpreting, and paraphrasing stories for the sake of academics should come at a later stage. Stories could be used in classes for reasons ranging from developing literacy skills to becoming a more humane person.

This article focuses on how storytelling can improve and enhance Listening, Speaking, Reading and Writing (LSRW) skills in young learners along with their ability to comprehend, sequence, predict, retell and write a story. The following is a list of creative activities that can be done in class.

Oral skills

Speaking a language fluently builds confidence in students and is achieved not by listening to lectures and repeating mechanically what the teacher has said, but by participating in joyful activities, such as storytelling.

Activity: Story bag

Objective: To help children make up stories, thereby improving their imagination and speaking skills.

Materials: A bag containing small objects, such as erasers, pencils, pens, sharpeners, coins, toffees etc.

Procedure:

- Narrate a story and explain to the children that each story has a beginning, a middle and an end.
- Ask six students in the front row to close their eyes and pick up any one object from the bag.
- Pick an object from the bag yourself.
- Start a story on the object that you have picked and let the children continue it by introducing their objects to the story.

Outcomes: Students will learn to weave a story by using realia, that is, materials and objects from everyday life used as teaching aids.

Retelling skills

Retelling is an important ability for building story comprehension which helps children recount stories in their own words. It also improves their listening and speaking skills along with sequencing.

Activity: Ball retelling

Objective: To help children retell a story

Materials: A ball

Procedure:

- Narrate a story to the class.
- Take a ball and toss it towards the students. The student who gets it must begin retelling the story from the start. After narrating the first line, the student must pass the ball to another classmate, who must add the next line to retell the story in sequence.
- The ball is passed around and every student who holds it participates in the retelling activity until the story ends.
- As a follow-up exercise for checking comprehension, make deliberate mistakes while telling the story and wait for the students to correct you.

Outcomes: Students will learn how to pay attention, understand and retell a story enthusiastically.

Listening skills

Good listening skills are important for learning a language, but listening does not only mean hearing the sound of words but also processing what has been heard. Children imbibe rich vocabulary, complex grammatical structures, and clear diction by listening to stories and their reading and writing skills automatically improve with the teacher's guidance and support.

Activity: Musical story

Objective: To improve the listening skills of students using audio resources

Materials: Musical instruments or recordings of different sounds; mobile phones and speakers

Procedure:

- Choose a story that has many sound effects, such as the twitter of birds, the beat of drums, the swish of the wind, the gurgling of streams etc.
- Narrate the story in class.
- Retell the story by pausing at places where a sound, such as that of birds appears. Play a recording of birds twittering through a speaker.
- Students have to say the word aloud in English by listening to the sound, such as 'cheep-cheep', 'tweet-tweet' or 'twitter' depending on their age and level.
- Continue retelling the story until the list of 'sound-words' from the story is exhausted.
- As a follow-up exercise, students have to say aloud or write sentences by using some of the 'sound words' they have learned.

Outcome: Students' vocabulary and comprehension will improve through the use of musical instruments and recordings.

Sequencing skills

Sequencing helps children comprehend what they read or hear. It also helps them identify the components of a story and then retell it in a sequential manner. Sequencing skills are important comprehension strategies, especially for narrative texts.

Activity: Reading cone

Objective: To develop reading and sequencing skills

Materials: Story page, pencils, notebooks

Procedure:

- Choose a children's story page from a magazine or newspaper.
- Roll the page into a cone and keep a small hole

at the top to peep in.

- Encourage students to peep in through the hole and read words or phrases that are printed on the inside page of the cone.
- Open the paper cone. Read out the middle portion of the story and ask students to narrate or write either the beginning or the ending of the story.
- As a follow-up exercise, ask students to draw characters, objects or actions from the story.

Outcome: Students' motivation to narrate and write a story in sequence will increase.



Figure 1. Reading cone

Sentence weaving

The ability to write correctly and clearly can transform any challenging writing task into a fulfilling experience. The development of sentence-making skills assumes vital importance, especially for students in the primary sections.

Activity: Game of halves

Objective: To help students kinaesthetically link the beginning and endings of sentences

Materials: Paper strips with partial sentences written on them

Procedure:

- Distribute paper strips containing half sentences from a story that was earlier narrated to students.
- Make students stand in two rows facing one another. Row 1 has the beginning of sentences and Row 2 has the endings.

- At your word 'Go', students from both rows have to run to find their respective partners and read out their sentences aloud to the entire class.
- Make all the sentence-pairs stand in order to reconstruct a story or a paragraph.

Outcome: Students will feel motivated to read, understand and put parts of sentences in order through the use of play.

Questioning skills

Questioning is an important skill that develops logic and reasoning. By learning to ask questions, a student's ability to gather information and knowledge improves, as do their verbal skills.

Activity: Five questions

Objective: To develop students' questioning skills

Materials: None

Procedure:

- Narrate a story to the class and ask a student (Pupil 1) to think of an object or a person from the story.
- Other students have to ask Pupil 1 five questions each to try and guess the correct answer. Questions about the physical features of the object (shape, size, colour) or person (age, mannerisms, dress) could be asked to get the right answers.

Outcome: Students will understand a story better and learn to ask questions.

Predictive skills

Prediction encourages children to ask questions and think critically. It also helps them understand and sequence a story better by paying more attention to what they hear or read.

Activity: Crumpled story ball

Objective: To improve students' listening, reading and writing skills

Materials: Story pages from old magazines and newspapers

Procedure:

- Cut out a story page from an old children's magazine or newspaper.
- Crumple the page into a ball.
- Call a student to your side and ask them to read aloud a few words on the 'story ball' and make them guess what the story could be about.
- Open the crumpled page and encourage the

student to read part of the story and let the other students imagine and speak aloud or write the ending.

Outcome: Students will learn how to predict and comprehend a story by improving their reading skills.



Figure 2. Crumpled story ball

Grammar competency

The parts of speech in grammar are considered 'the building blocks of sentences'. To write grammatically correct sentences in English, children must know at least some of these.

Activity: Story envelope

Objective: To help students identify and use parts of speech correctly

Materials: Slips of paper with words from a story written on them, envelopes

Procedure:

- Narrate a story to the class and make photocopies of its printed format.
- Cut out nouns, pronouns, verbs, adjectives, and adverbs from the text and put them into different envelopes.
- Divide the students into groups and each group gets a set of envelopes for creating sentences.
- The group that makes the highest number of correct sentences gets the chance to read them aloud to the class.
- As a follow-up exercise to assess comprehension, ask students to mime certain words or phrases from the story and let others come up with the right answers.

Outcome: Students will learn the right usage of grammar by listening to a story and playing a group game.

Reflections

The activities described in this article to develop literacy and other abilities in children have been tried out in schools across Arunachal Pradesh, Assam, Nagaland and Odisha. Students' enthusiasm and performance in class have improved in certain schools, as have their abilities to comprehend,

narrate, retell, read and write stories on their own or with the help of their teachers.

The fun element of these story activities have motivated young children to learn better and quicker. They have also inspired teachers to use stories creatively in class. By doing so, both teachers and students have benefitted. This has emerged as an interesting activity that can make language classes so much more fun and educative.

Endnotes

- i The role of storytelling on language learning: A literature review. Semantic Scholar. <https://www.semanticscholar.org/paper/The-role-of-storytelling-on-language-learning%3A-A-Lucarevschi/6afa2c67e6b53337ff4b833d975b6939ec3650e6>
- ii Why is storytelling important to children? BBC Teach. <https://www.bbc.co.uk/teach/teach/why-is-storytelling-important-to-children/zvqcnrd>



Nabanita Deshmukh is a teacher, a teacher educator and a writer of children's stories and rhymes. She works extensively in education with schools and communities of Northeast India. Her hobbies include reading, painting, handwork and sports. She may be contacted at deshmukh.nitu@gmail.com

Stories generally attract and interest all age groups of children provided they get a chance to participate actively and understand what is happening in the story. For teachers too, it can be a tool where various developmental domains and learning outcomes can be reached.

In my initial experience, the storytelling sessions with students of classes I and II were not at all successful. With lower attention spans, the children stopped actively participating after a few minutes. I learnt that the essence of the story is to keep the children connected with the different characters and their emotions rather than questioning them to assess their knowledge. Initially, I asked many questions on every page due to which the connection with the story would be interrupted and children would lose interest. When I tried telling stories with actions and voice modulation and did not ask many questions, I observed that students started listening to the stories more attentively.

Similarly, I did not imagine that I would be able to engage children in *anganwadi* centres (aged between 3-5 years) in storytelling sessions but when I began telling stories during circle time, they listened so attentively that they were also able to draw the characters of the story after a session. They could describe the story in their own words – in their home language or through art. Storytelling also helped as a general pedagogy when I faced issues, such as children fighting, making noise or not doing the work given to them. Storytelling became the go-to, or saviour, strategy whenever my lesson plans failed to work with the students. It has worked well with students of *anganwadis*, primary as well as in upper primary classes.

Observing the gradual transition of the students from not taking interest in reading books to running to the library and asking me to read out stories, I learnt how the manner of telling a story is also important. A storyteller must do the following:

- Acquire the skills of voice modulation and intonation
- Aptly synchronise the telling of the story with suitable actions

- Choose stories that will be of interest to the listeners
- Prepare and plan the story you are going to tell by going through it several times
- Use appropriate TLMs
- Practise before the session

Storytelling, in my opinion, should provide a chance to the learners to think differently and independently. Opportunities to present different points of view and opinions should be provided and encouraged. For example, leaving the ending of the story open for children to interpret

Big Book story: Dhani ke teen dost

I read out a part of the story, *Dhani Ke Teen Dost*,ⁱ a *Big Book*ⁱⁱ to the children in an *anganwadi* centre and asked them to interpret what might have happened to the crow in the middle of the story (the children had to look at the pictures in the book and tell me this based on their own imagination and reasoning). Children were curious and had questions, such as: Where did the animals go? Why was Dhani upset?

I asked them to think and tell me. I could see that they were able to build their own connections and I continued the story with actions and gestures. One student said, 'The crow met with an accident and its leg broke, so it started to cry loudly.' Another said, 'The crow is hungry that's why it is crying.' Yet another added, 'Due to the heat it fell down while flying.' I was amused how they were able to bring newer ideas seeing the same pictures. As a teacher, I appreciated and acted as a facilitator rather than an instructor during the session.

An important objective of preschool education is that children become effective communicators. This can be achieved by providing the children opportunities for expression during such storytelling sessions. It can be further connected with the larger aims of education to make a person a rational and independent thinker with clarity of thought and decision-making, rather than accepting facts without logic.

Effective storytelling

In using stories and storybooks as pedagogy for young children effectively, the following should be kept in mind:

Choice of storybooks

- Storybooks must have more pictures and less text.
- They should be bright and colourful to attract children and keep them engaged.
- Characters and contexts of stories should be of interest to children, like animals, nature, etc.
- The text and illustrations in storybooks should match in a way that helps children to develop print-awareness.
- Stories should not be too long because the attention span of children is short.
- The language of the story should be easy. For example, if the text in the story rhymes, it is easier for the students to comprehend and repeat during the class. This helps in development of oral language and listening and in increasing attention span.

After the story

- After every storytelling session, have a guided conversation or ask open-ended questions related to the story to assess the children's understanding of the story as well as providing them opportunities for creative expression and thinking, both orally and in writing/drawing.
- Multiple questions should be avoided during the session as it hampers the connection of the story to the listeners. Questions should be open-ended to give students the opportunity to think and answer by connecting with their own surroundings. For example, after reading

this story, I asked these questions: Do you also have any animal friends like Dhani? If yes, which animal? What does your animal friend like to eat? This enables children to learn in real world contexts, talking, problem solving, asking questions, sharing information, exchanging ideas, reflecting and integrating information with existing, knowledge and skills.

Sparking curiosity and interest

- Providing access to different storytelling modes, like using picture cards, *Big Books*, stick puppets and by opportunities for creative self-expression, such as answering questions or making predictions about the story; expressing through art or doing role plays fulfilling multiple Learning Objectives (LOs) where the child expresses and represents ideas, imagination, emotions using variety of mediums/forms (music, art, dance/drama) verbally, through actions, visual arts, etc.
- In order to ensure active participation of the students, teachers should involve the students in questions, actions and gestures, repetition of sound words which improves their self-expression and language development. For example- In the story, the sounds of animals like of crow was *kao-kao*, cat was *myao-myao* which is directly related to introductory phonological awareness skills and identifies similar sounds in the environment.

Storytelling as a pedagogy provides a window for the teacher to experiment with the same story in different ways, guide the students to create more stories and become a better storyteller. It serves the purpose of not only an important learning tool but also caters to the well-being of children and provide immense enjoyment.

Endnotes

i *Dhani Ke Teen Dost*, Suresh Swapnil, Room to Read India.

ii *Big Books* are intended for young children who are learning to read. These help connect children with printed material so that they are inspired to look at, browse, and read books on their own.



Anuja Halder has worked as an Associate (2021-22) with the Azim Premji Foundation. She was a Resource Person for English and ECE at Khatima, Udham Singh Nagar, Uttarakhand. She has a master's degree in English and is about to pursue a PhD in gender studies. She has a keen interest in drama and gender studies. She can be reached at anujahalder18@gmail.com

Schoolchildren are rarely exposed to *Big Books* like *Lightning*. This type of material is not easily available in schools. When the children first see the book *Lightning*, they become very excited because they have never read such a big-sized book before. This book has all the hallmarks of a *Big Book* and its content is relevant to children and provides them with new experiences. When we consider the pedagogy of teaching children to read, there are many opportunities for children to guess and come up with an explanation for the illustrations, which are very appealing and engrossing. The experiences of reading this book to students of classes I and II in a few schools are shared in this article.

This is the story of a famous tigress, named Lightning, who lives in the Ranthambore forests (Ranthambore National Park). Looking at the book's illustrations, the children know that there is a snake, a deer, a bird, and a temple in the forest. The pictures also familiarise them with Lightning's routine activities throughout the day. The book is unique in that it challenges our perception of wild animals – that they are dangerous and attack us – and fosters our sense of sensitivity towards them. It is common to read in Uttarakhand newspapers about tiger or leopard attacks on humans or cattle. As a result, people's perception of a tiger is that of a dangerous animal. And this is what the children learn too. This affects our sensitivity to animals, which is limited to moral preaching.

The images and descriptions on the first few pages of the book demonstrate the close relationship between the (Ranthambore) forest and Lightning. This is a relationship with both the forest and the people of the village. This also gives the reader an idea of how a forest and the animals and birds in it have a symbiotic relationship and examines its relationship with human beings. The story continues to reinforce this relationship. In some places, the book prompts us to reconsider our preconceived notions and our relationship with animals.

When the children first discuss the book, they say that Lightning is a lion, cheetah, tiger, and

so on. During the conversation, the specific characteristics/features of a tiger needed to be explained. While reading the book, the children were told that Lightning is roaming the forest, now going to drink water, and now sitting under a tree. When asked to predict what will happen next in the story, the children say that she will attack an animal.

But the story takes an unexpected turn when Lightning falls into a well and the children begin to wonder what happened. They are surprised that when everything was going so well, what caused this sudden turn of events? They had seen and were delighted by the bright pictures. But suddenly the next image was black! The children felt disheartened. They were shocked when they saw a picture of the inside of the well into which Lightning had fallen. They became concerned about her and how she would survive. But although this bothered them, they expressed the hope that she would be saved eventually. Their belief is confirmed when in the story, the villagers get together and one of them makes a phone call. The story kept them engrossed in this way.

There was also a debate about the book's title. The children speculated about Lightning's eyes – that they must be shining like the eyes of a cat at night – and that is how her name came to be Lightning; or that she may have been named after her roaring, which is similar to lightning and thunder during rain.

In telling this story to children, when we come to this point of where Lightning is in the well, I ask the children, 'How do you think Lightning will come out?' The children offer ideas based on their own experiences. Some children suggest that it can be done by putting a ladder into the well to bring her out; someone says she could be brought out with the help of an excavator machine; another child thinks that she will come out using her claws; or can be pulled out using a rope. Someone else suggests that a rescue team should be deployed and some even suggest calling the police. Later, when they

see a villager in the picture making a phone call, they realise he is calling the police. Some even mention Forest Guards and Officers.

Later in the story, when they see the tigress being rescued by sedating her with a tranquiliser gun, their minds open up to this possibility, and they gain a new perspective on how efforts to save animals are made. How is she injected with a gun to render her unconscious? Where is it given? Then

how is she taken out? The children's eyes were wide with wonder. One can feel their anticipation as we proceed with the story.

After being rescued from the well, when Lightning is taken in a van for treatment, the children feel a sense of relief. After hearing the story, the children in the school where I read it, said it was enjoyable. They went on to ask, 'Will you come tomorrow?' What makes this book special is that it keeps

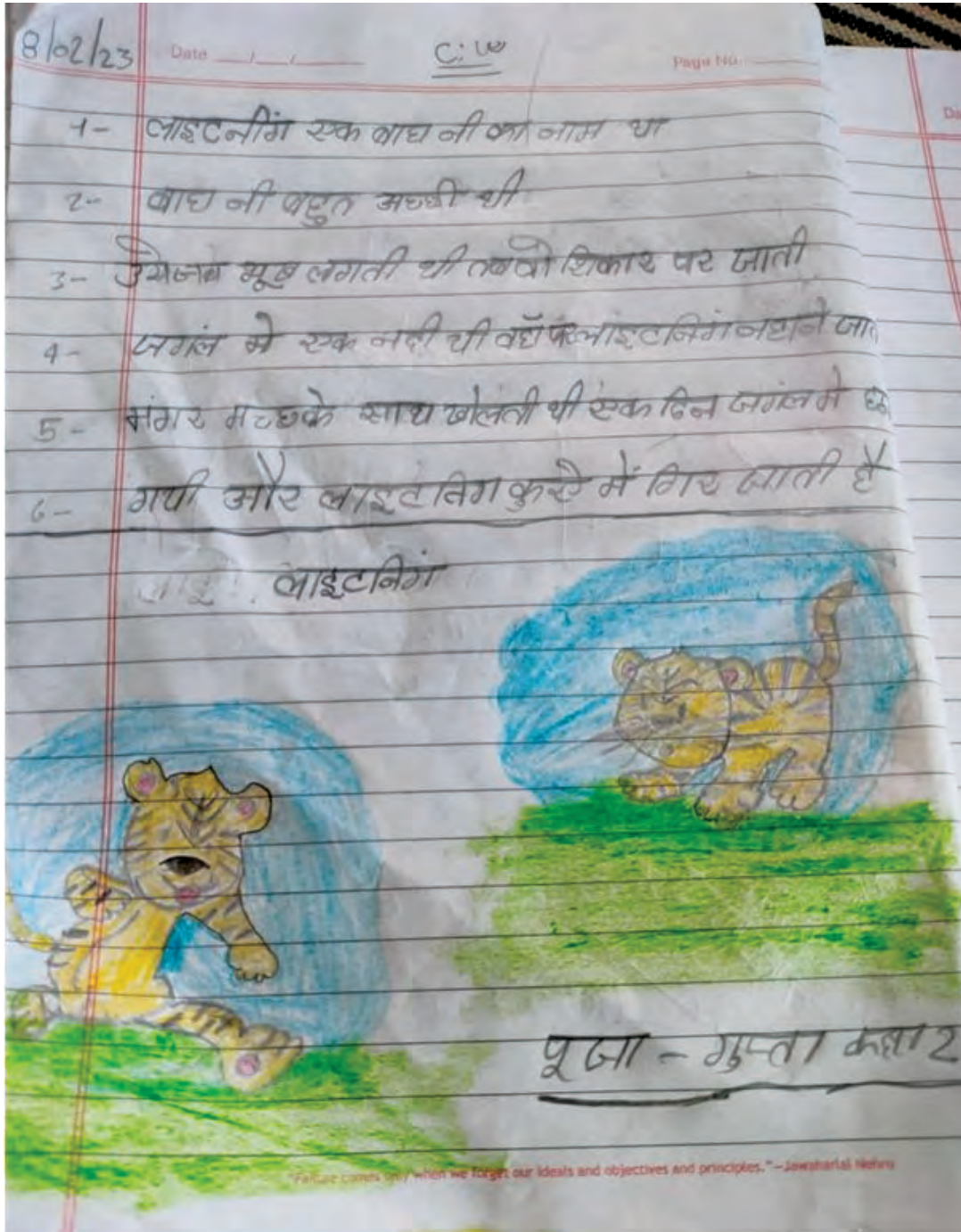


Figure 1. Drawing based on the story by a student of class II, Government Primary School, Pakdia, Khatima, Uttarakhand

children guessing about what will happen next. This is how children become interested in books.

Observations

When we select a book to read or discuss with children, we must ask ourselves, 'What is so special about this book that will connect with the children and also give them a different perspective, or some new ideas and opportunities to think about?' It is similar to the notion that by reading literature, we become 'new'; that we are no longer the people we were. This is the pleasure of a good book. It is also possible that a specific book may come to occupy a special place in their long-term memories; one that cannot be forgotten. Making a book 'connect' with children depends on how the book is presented to the children by the person narrating the book.

After listening to the story, the children draw their own pictures of the book to express themselves. They also propose new titles for the book. This stimulates their thinking. Along with this, we also talk about how they help the animals and birds around them. They spoke about their experiences with helping puppies. As a result, we believe that such opportunities for children to develop a love of books should be provided on a regular basis. Of course, the role of the teacher is crucial when it comes to selecting books to read to children. To choose good books, the teacher should gain an understanding of good literature for children. Another important aspect is that reading to children improves with practice: the more the teacher reads, the better they become.

Endnotes

- i *Big Books* are intended for young children who are learning to read. These books help connect children with printed material so that they are inspired to look at, browse, and read books on their own.

References

Lightning (*Big Book*) Author: Prabhat, Illustrator: Allen Shaw. Jugnoo Prakashan, an imprint of Ektara Trust. <https://www.ektaraindia.in/ektarashop/Lightning?search=Big%20Book&description=true>



Kamlesh Chandra Joshi has been involved in primary education for a long time. He is passionate about a variety of educational issues, including early literacy, children's literature, and teacher education. He is currently working with the Azim Premji District Institute in Udham Singh Nagar, Uttarakhand. He can be reached at kamlesh@azimpremjifoundation.org

It is because of my love for stories that I take this medium of engagement to the classrooms, hoping that my excitement for reading and listening to stories gets rubbed off on at least a few of our young students.

One day in June last year, on a regular school visit to a school in Sagar, Madhya Pradesh, I had gone prepared with a few stories that I would tell the children. The teacher of classes I to III multi-grade, multi-level (MGML) and I discussed the plan for the day. The teacher informed me that a revision and two poems needed to be completed. The two poems were from the textbook, one was about a cow, and the other was about a bird building a nest. So, together we planned the revision of the poems about animals that the children already knew.

After this, I read aloud the story *Har Ped Jaruri Hai* (Level 2, Pratham Books). This story mentions numbers, various types of trees, birds that sit on them, different flowers and where they grow. The children were familiar with the names of the common trees like, banyan, *peepul*, *neem*, tamarind, *jamun* and birds and insects that were in the book, like the parrot and the honeybee. But they were not able to make out the difference between the pigeon and the bat even after prompting them to look at the way the bat was shown hanging in the illustration. Later, when I told them that it is a bat, one of them said that he has seen it in the night when he was playing outside after dinner. The conversation created an opportunity for shared experiential learning.

Then, the teacher talked about how, in her childhood, she had seen fireflies many times but now they were hard to find. The children were curious about where the firefly got its light from. Their answers were very interesting; they mentioned battery and solar power and a TV show in which a bear helps a firefly find its light in the forest!

Since we had to do a poem involving birds and the nest and having read the story regarding the trees, I thought we could take the children outside, and make them see the different varieties of trees that are around them. As the children came from homes around the school, it was also a chance for

the children to show us around and point out the different varieties of trees in their locality.

Just opposite the school is a big tree – it is three trees growing together as one – a *bargad*, a *peepul* and a *neem*. The trunks and branches of all three are intertwined together. We helped the children understand the difference between the three with the help of the features of the three different trees, like the shape, colour and texture of the leaves and the hanging roots of the banyan tree. There were elders resting under the tree, who gave the children some leaves that they could touch and feel.

The children observed squirrels climbing the tree through the ariel roots and a few birds, like crows and sparrows flying towards and sitting on the tree. A child noticed a beehive on the tress and nudged me to stop and see it and acknowledge him. Then we walked around in the neighbourhood, and observe other trees, like papaya and *ber*. The children were familiar with these trees.

When we got back to the classroom, each child had brought leaves from different trees. The teacher and I discussed with the children what they had seen. Then we made a poster with the different leaf shapes and their names under it and put up the poster in the classroom. After this, we recited the poem about the bird building a nest with actions. The children talked about how they have seen birds in their nests on the tree. A child shared how a pigeon had built its home with pieces of wood on their terrace.

Linking stories to curricular needs

The teacher then started with the chapter she needed to cover by engaging with the children first in a picture conversation based on trees and how trees are one's friends with some prompts.

- If trees were your friends, what would you do with them?
- Where would you take them? Why?
- Which trees will you accept as your friends? Why?

The children's answers were also diverse and varied. The trees that they mentioned they wanted to be friends with were mainly, mango, guava, pomegranate, tamarind and neem. The reasons given were that they were big and children could

play under them, rest in their shade, sell their fruit and earn money. When asked why would the tree be willing to give them fruit for them to sell and earn money, a child said that the tree would also fulfil its part in the friendship.

Perspectives and pedagogic practices

I realise that bringing in the medium of storytelling and creating the space for conversation and discussion has not only helped me take the story *Har Ped Zaruri Hai* to the children but has also helped the teacher catch and sustain children's interest and attention and build momentum by altering it as per the needs of the classroom.

The curricular content is also important as the story made the children active, interested, and participative, especially because the topic being talked about was something they could connect with and contribute to. It was really enjoyable and enriching to be part of these conversations amongst the children as well as the collective discussions and sharing in the classroom.

Actively and instantaneously trying to integrate innovative approaches to take forward the curricular content was very interesting for me. Not only the children but also their teacher and I enjoyed the experience. In a way, it became more meaningful and enhanced the way the children connect to their surroundings with what they study and engage within their classroom. At the end of the day, the teacher told me, 'I thought you were just going to tell the students some story; I did not think we will be doing all this, and also completing today's portion!' She said that pedagogic approaches like this gave her an idea as to how to integrate all the resources available in the environment in the day-to-day classroom engagements.

Child-friendly approach

The above instance is one example of classroom practice. I can think of various other instances

when children as well as the teachers and I were astonished at how much simple storytelling can help us open up the world of thinking, imagination and communication in the classroom spaces and at the level of each child.

Academically speaking, storytelling as a pedagogic approach helps in achieving the following learning outcomes that are considered foundational. The learner is able to:

- Associate words with pictures
- Name familiar objects seen in the picture
- Respond to comprehension questions related to stories in home language/school language/ English/sign language, orally or in writing (phrases/ short sentences) if they want to
- Identify characters and sequence of events in a story
- Express their opinion verbally and ask questions about the characters, storyline, etc., in the home language/school language/English/ sign language
- Draw/write a few words/short sentences in response to the story
- Think back on their own experiences and add them to the classroom discussion

Repeatedly engaging with stories, both for their own value and with an intention to link to curricular content, made me recollect time and again John Holt's words, which I read in *How Children Learn*: 'Call it a Faith. The faith is that man is by nature a learning animal. Therefore, we do not have to "motivate" children into learning. We do need to keep picking away their minds to make sure they are learning. What we need to do, and all we need to do is bring much of the world as we can into the school and the classroom; give children as much help and guidance as they need and ask for; listen respectfully when they feel like talking; and then get out of the way. We can trust them to do the rest.'

References

Har Ped Zaroori Hai by Praba Ram and Sheela Preuit, Pratham Books. Illustrated by Sangeetha Kadur. Translated by Deepa Tripathi. <https://storyweaver.org.in/stories/17146-har-ped-zaruri-hai>



Mathumitha R is currently working as a Language Resource Person in Azim Premji Foundation, Chamarajanagara, Karnataka. She has completed her master's in education from Azim Premji University. She is passionate about engaging with children especially through nature, storytelling and theatre-based activities. She may be contacted at mathumitha.r@azimpremjifoundation.org

Learning Through Stories

Padma BM

Introduction

Stories are engaging and universally liked. Our history and mythology are full of stories, and we never forget the stories we hear in our childhood. In Kannada, stories such as *Kagakka Gubakka* (The Crow and the Sparrow), *Govina Haadu* (The Cow Song), *Elu Samudrada Aache Iruva Rakshasa* (The Demon Residing Beyond the Seven Seas) are always remembered. Since everyone loves stories, I strongly urge that all subjects in schools be taught through stories.

Search for children's stories

Looking for children's stories in Kannada, I ended up finding only 'story poems'. There were no picture books. Most books were translations in which word usage, sentence structure and some themes were beyond the children's cognitive level. It is then that I got the idea of rewriting folk stories inherent in our culture and new stories that are relevant to our environment. Since teachers know the children they interact with so well, stories written by them are relevant and useful. A workshop on story-writing was organised by the Bangalore District Institute (Azim Premji Foundation) for *anganwadi*

and government primary school teachers with the objective of creating a repertoire of stories for children. We got a lot of stories as a result.

Methodology

Since the dialects, customs and environment of the various regions of Karnataka are different, it was decided to bring the teachers of all the regions under one roof to create the stories. Before the workshop, we read a number of translated, illustrated stories from children's literature and sorted them out according to their subject matter. We also discussed the focus of, and the learnings inherent in the stories.

Some of the stories were ones that the children could relate to, for instance, *Akka Tangi Gubegalu* (The Owl Sisters), which we illustrated and published as a bilingual book, was written by one of the teachers. There were others: *Hunase Peppermint* (Tamarind Candy), a story of the quandary two sisters find themselves in while making tamarind candy; and *Puttiya Prashnegalu* (Putty's Questions) about a little girl called Putty, who questions everything that comes her way during her visit to her grandmother's village. *Mara Rakshasa*, (The



Figure 1. *Puttiya Prashnegalu*, one of the stories created and illustrated during the workshop

children think! Storytelling helps in the cognitive development of children and makes them think for themselves.

Learning maths

Teaching early mathematics through stories helps children comprehend the concepts easily. In the story *Ombatthu Putta Marigalu*, described above, the rooster collects the eggs of eight different birds and puts them in the nest. After a few days, the chicks hatch and go in search of food. They come across a flock of birds of their own species and start flying away one by one. The questions were: how many birds flew away each time? How many birds were left? The children learned subtraction in a natural way.

Learning science

We introduced 'magnetism' to the children using the story, *Mantrika Tundu* (Magic Piece, Pratham). A little girl finds a magnet in her brother's room and discovers that some objects stick to it while others do not. After the story was read to the children, they were given a piece of magnet and asked to list out the objects that were attracted to it. The children were interested and curious even while doing the activity. The story of the birds had taught them how long it takes for the chicks to hatch, their diet and lifestyle. Another story, *Muniya Padeda Nidhi* (Muniya's Treasure) introduced to them the stages of a plant's growth.

Learning social science

Early learning includes an introduction to the family, different professions and regions, illustrated

characters and events. In the story *Kshoura Dinaacharan* (A Day in the Life of a Barber), Shringeri Srinivas, a character in the story, goes to different professionals, like a tailor, a carpenter and a barber to get his hair cut. The children could easily identify these characters through the illustrated dialogue in the story. The inclusion of family members in the story made it easy to introduce various relationships. In another story, *Sasaki Matthu Savira Kokkaregalu* (Sasaki and the Thousand Cranes), Sadoko Sasaki was a two-year-old girl when the atom bomb was dropped on Hiroshima. As a consequence, she was diagnosed with cancer at the age of ten. Sasaki starts preparing thousands of paper cranes, with the hope that the Japanese will survive if she accomplishes this goal. But she dies before accomplishing the task, which was later completed by her friends. Listening to this story made it easier for the children to understand the backdrop of the bombing and its consequences.

Enhancing awareness

The questions asked during the course of storytelling play an important role in increasing awareness and empathy. If children are asked, what would they do if they were a character in the story, it helps and develops their thinking and problem-solving skills. For example, if the story is about dreams: *What do you dream of?* If the story is about fear: *What are you scared of? What do you do if you are afraid?* Questioning children's reactions gives them an opportunity to express their feelings and also to relate their own lives to their learning at school.



Figure 3. An illustration from the story *Ombatthu Putta Marigalu*

Discovering values

In the story, *Prakrutiya Koduge* mentioned earlier, a weaverbird and an elephant are friends. When the elephant wants to fly, the bird helps create wings for it and teaches it to fly. But the elephant falls to the ground, making the bird sad and apologetic. In the end, however, both the weaverbird and the elephant realise that each of them has different physical attributes. When the children were asked for their opinion, some said that it was good of the bird to help its friend. To others, the bird apologising to the elephant for the elephant being injured seemed unfair. One group said they liked the dialogue between the bird and the elephant at the end. There was no need for us to bring out just one moral from the story when the children themselves could think of so many different points of view.

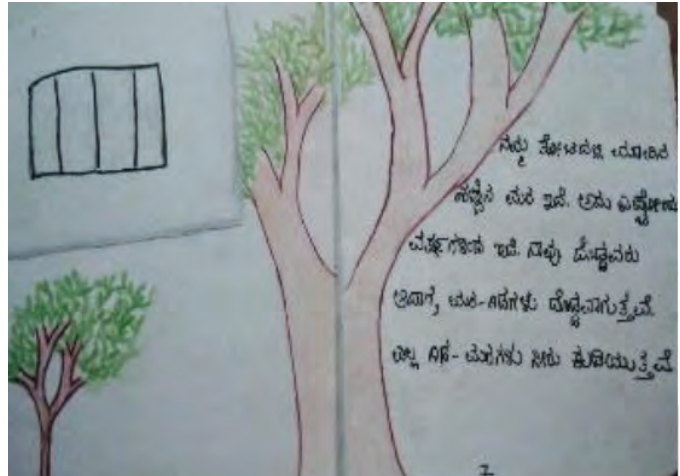
Some useful tips

- While telling a story to children, stop at an interesting point and ask some questions. Tell

them to complete the story, either orally or as written work. For example, when this line, 'A fox falls into a well,' was read out, the question asked was, 'How do you think the fox managed to come out of the well?' The children completed the story in the following ways: 'The well had steps and the fox came up climbing those,' 'The fox came up with the help of climbers (vines)' and 'The fox came up with the help of others'.

- Simple English stories can be translated into Kannada and illustrated. This can be done for any language.
- When a series of pictures were given to the children, they wrote different stories which were kept in the school library for other children to read.

In addition, apart from the important part stories play in children's language learning, the characters and themes help in the significant process of socialisation, a very important aspect of school life.



Figures 4 - 5. The story translated and illustrated by children



Padma BM is a Resource Person at the Azim Premji Foundation and works with government schools in Bangalore. She has a master's in Kannada and has been a practitioner in the field of education for over 15 years. She believes that good quality primary education is the basis of children's holistic development. She may be contacted at padmavathamma.munivenkatappa@azimpremjifoundation.org

This article presents two different experiences of telling stories to young children. One of a classroom setting and the other of informal interactions with a child. The children and I both loved listening to these stories. Adults, be it parents or teachers, often try to set objectives for the engagement with children even before we begin the interaction. These objectives are usually aligned to some pre-decided learning outcomes. One example of this is that after reading a story or a narrative, youngsters will be able to understand the meaning of difficult words, will be able to re-tell the story or speak about the story in at least a few sentences and so on. Such objectives were not considered in the interactions described here.

I simply read the stories to children. Wherever there were questions, we discussed. Whenever there was a joke, something funny to laugh about, we laughed together. We also shared surprises, responses and our sense of wonder occasionally: 'How can this be possible?', 'How did it happen?' Or, more specifically, 'Why did they (the character) do it?' and pondered on whether or not something that someone did was correct or not, and so on. In other words, children lead conversations about their thoughts and feelings as the storytelling progressed.

Storytelling in the classroom

It was a spacious room with 25 class I students. The large room had four wide windows with ledges on which children could sit. The new session of the school had begun 15 days ago but, it was my first day of school. Before beginning work with these young children, I had visited the school, observed the teachers teaching from the textbooks and was wondering with what and how to start teaching them. Then, it occurred to me that storytelling may be a good idea to help me connect with the children. So, I decided to do storytelling for a few days before moving to other areas.

I told these children of class I that every day, during the first period of school, we would share a story. I showed them the two-three different storybooks

(multiple copies) that I had brought along. Then, I asked children to sit closer to me. Some children complied, while others did not. A few children were sitting on the window ledge and remained there. A small girl sat at the window, and she kept staring out of the window for the whole duration of the storytelling session. Some children were playing with their pencils, while thankfully some others were looking at me. Subsequently, I read the selected story *Kya Tum Meri Amma Ho?* (Are You My Mother?) to them. When this story ended, I told them another story till the period ended.

The following day, children themselves said that they wanted to hear the previous day's story again. The classroom seating was the same as the day before. I began telling the same story *Kya Tum Meri Amma Ho?* But this time, I did not read out the story but retold it from memory, because of which the order in which a baby bird in the story meets the animals changed. Immediately, the girl sitting at the window, stated, 'No, the baby bird did not meet the dog first.' A second child added, 'It first encountered the cat, then the hen, and then the dog.' Another child commented that the cat and dog were good because they did not eat up the tiny bird. There were a lot of similar reactions from the children. I realised that my impression that many children were not paying attention was wrong; they were listening. In fact, they were listening so carefully that they were very sure of the sequence of the story. It was clear that the children had followed the story and remembered each character and their part in the story.

For roughly 10 days, I told stories and recited poems to these children. They became more articulate and communicative and wanted to hear more and more stories. However, this had to be halted to 'complete' the syllabus.

The thought that repeatedly troubles me and keeps coming to my mind is, *what is the meaning of finishing the syllabus? Is this storytelling unrelated to the syllabus? Should it not be part of the syllabus?* If you ask me, what the kids and I achieved during those 8-10 days of storytelling

was phenomenal. Children would hum the lines of the poems and talk about the stories even outside the classrooms. In these conversations, their questions, their understanding of those questions, their analysis, and their understanding of the relationship between one story and the other, was evident. They asked all kinds of questions: *Can a baby bird start walking soon after hatching? What is the size of an egg?* Some children in our class eat egg but others do not. *Is it good to eat eggs? Who has a cow in their house? How does a calf walk?* And many more. I would also like to highlight that while some children asked question along with or just after the first story, there were quite a few children who said something only after 5 -6 days of listening to these.

Even today, whenever I think about storytelling, I find that it is much more useful and effective than reading and writing. It is directly related to the development of the child as a person. Perhaps in our hurry to teach children to read textbooks, we obstruct their natural learning process that comes through listening to and engaging with stories.

Telling stories to a child

One important step towards children developing an interest in reading-writing is their being able to choose texts that they would enjoy reading. Therefore, allowing youngsters to explore books to find the material of their choice on their own is a vital part of creating a love of reading in them.

Children have their preferences for stories. This child that I read stories to was four years old and wanted to hear a new and long story every day. Once, he refused to hear a story that I had read out to him earlier. In the story, a bear cub dies (although it is brought back to life); the child remembered this. I had just begun the first line when he said sharply, 'No not this, I don't want to listen to this; I have heard it; the bear cub dies.' This reaction told me that the cub dying had been on his mind and had perhaps troubled him all along.

Stories help children connect with the happenings around them. I had read out a series of stories about dinosaurs when this child was about 5 years old. These stories contained many facts about dinosaurs – their size, their food habits etc. The stories also had information about dinosaur fossils and how fossils are searched and discovered. A few days later, a garden nearby was dug up to look for fossils. This started a conversation about what fossils are made up of, how they are formed, the

time it takes and also about how much effort and patience is required to locate them.

In one of his papers, Vygotsky states that imagination does not develop in a vacuum and imagining is based on prior experiences. It could be a personal experience or something that has been heard. Stories are excellent ways of providing the second type of experience. They lead to the development of imagination and imagination can go in many different directions. So, apart from the story, a reader can think about the author: *Who is the author? What are they like? Where do they live? Which language do they speak? How do they write? When did they start writing? How old would they be?*

From Roald Dahl's *Going Solo* that I read to him, this 8-year-old learned a lot about Africa. In one of the stories, the author is involved in an accident in a fighter plane. He has bruises all over his body, and his entire face is bandaged. He cannot see; he can only hear. Because he cannot answer the nurse's questions, she tells him to just press her hand if he wants to answer in the affirmative. After 3-4 months of reading this book the child was unwell. I told him to rest and also keep quiet. He said 'OK, you just give me your hand when you ask me a question, if I want to answer yes, I will press your hand.' (He was indicating that I may need to ask if he is thirsty, or hungry or if I want to go to the washroom or stand up etc.)

As mentioned, interacting with concrete experiences helps to enhance these threads of imagination. For example, after reading aloud *Going Solo*, the child had many questions: *Is Africa larger than India? Is it larger than China?* So, we looked at a globe and found out that Africa is not larger than China. Then which new stories should you listen to? What else should you listen to? All these become important concerns.

Conclusion

When I started telling stories, I had not thought about how it would benefit or what children will learn from this exercise. I realised many of these things much later, sometimes, after months of the narration.

It is not necessary that every child will understand the story the way we intend them to. This has been underlined by many scholars and teachers. Anita Dhyani in her article¹ mentions that she came to know the true meaning of a sentence from a story that she had read in school when she herself

became a teacher. Children can create relevant meanings for themselves from stories. We can never fully understand how a child perceives a narrative, what they understand from it, and how

they understand it. However, stories do leave an impact if children develop the habit of listening to them.

Endnotes

- i Why Story? Stories and Different Dimensions of Understanding. Anita Dhyani. Pathshala Bheetar Aur Baahar. Azim Premji University. <https://anuvadasampada.azimpremjiuniversity.edu.in/2262/>

References

Imagination and Creativity in Childhood. Lev Semenovich Vygotsky. *Journal of Russian and East European Psychology*, vol. 42, no. 1, January–February 2004, pp. 7–97. <https://www.marxists.org/archive/vygotsky/works/1927/imagination.pdf>



Rajni Dwivedi is member of the editorial team of Azim Premji University's *Pathshala Bheetar aur Bahar*. She may be contacted at rajni.dwivedi@azimpremjifoundation.org

Teaching Mathematical Concepts Through Storytelling

Ranganath

For the last two years, I have been travelling across Yergol, one of the educational zones in the Yadgir district of Karnataka. Here, I observed the untapped potential of learning maths through storytelling activities in schools. The process of finding stories which can aid maths learning, aligning it to the learning outcomes of classes IV and V initially turned out to be difficult. However, I found a story titled *Muttajjiya Vayasseshtu?* (How Old is Muttajji?)ⁱ by Roopa Pai. The story, along with its curious characters and complex subplots, throws up situations in which students need to unpack the problems and find solutions.

The story is about the adventurous journey of two children who try to discover the exact age of their *Muttajji* (great-grandmother). The storytelling activity provided our government school children with opportunities to unpack clues and arrive at answers using the operations of addition, subtraction, and logical reasoning.

Though students found the story and its problems interesting, they initially asked me direct questions, such as which operation to use to arrive at the answer. Through the dialogue – of asking the right questions and providing alternative cues, students tried to symbolise their thought processes in their notebooks, which was different from the traditional way of practising operations. In this article, focusing on my dialogues with the students and their note-taking process for abstract thoughts, I have attempted to unpack the potential of storytelling in learning maths.

I began the story with a basic introduction of the storybook in class V in the presence of the class teacher. During the initial conversation about *Muttajji's* age, a few students said that her age would be 200 years as expressed by Putta, one of the characters in the story. I felt if students give answers in haste without applying logic, then the aim of learning the addition and subtraction of four-digit numbers would not be served. Keeping this challenge in mind, I instructed the children to note down anything that they felt was important

for solving the problem and the situations as they occurred in the story. These responses later made me realise how children process their thoughts when they write.

Methodology

Students were given the clue that 1916 was the year when the Kannambadi Damⁱⁱ was built, and this was somehow linked to the year *Muttajji* was born. A few students asked me which operation to follow for the calculation. A student tried this (*figure 1*) to find the answer.

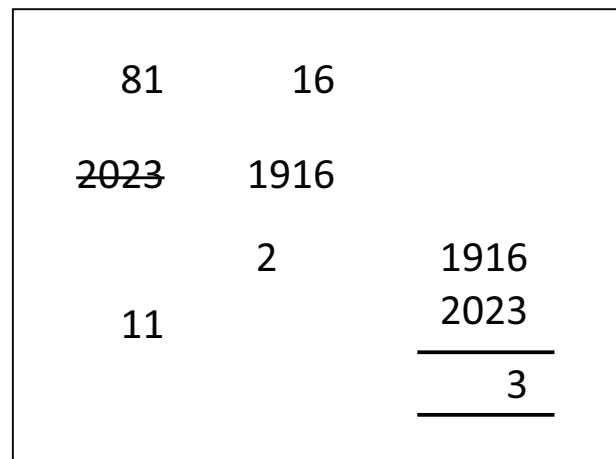


Figure 1.

Observing this, I felt that maybe as facilitators, we need to observe the problem students face when they encounter a situation where they need to apply logic and derive answers. To make it easier, I asked the following question: 'If your age is 12 years in 2023, what should you do in order to know how old you were in 2014?' The children gave various answers, such as add both years, subtract 2023 from 2014, etc. Before continuing, I asked them about their current age and the year of birth. I received many responses, and I chose a random year after their birth year and asked them to tell me what their age would be in that year. For this, the students came up with the following responses (*figures 2, 3, and 4*), which created bliss in me as I was expecting such creative work from them.

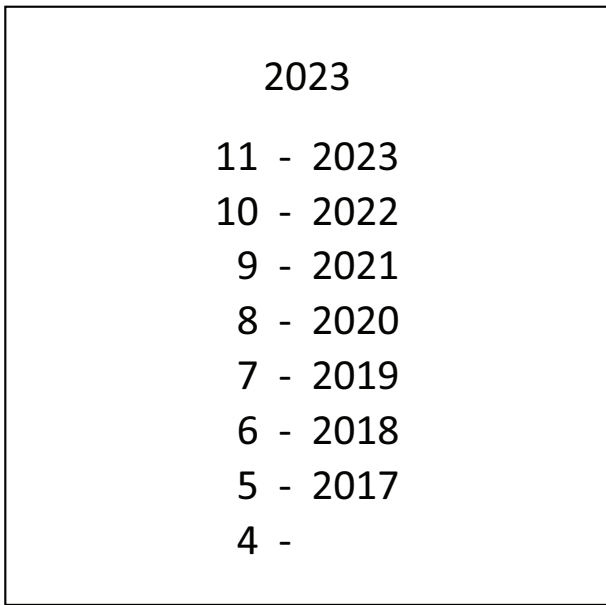


Figure 2.

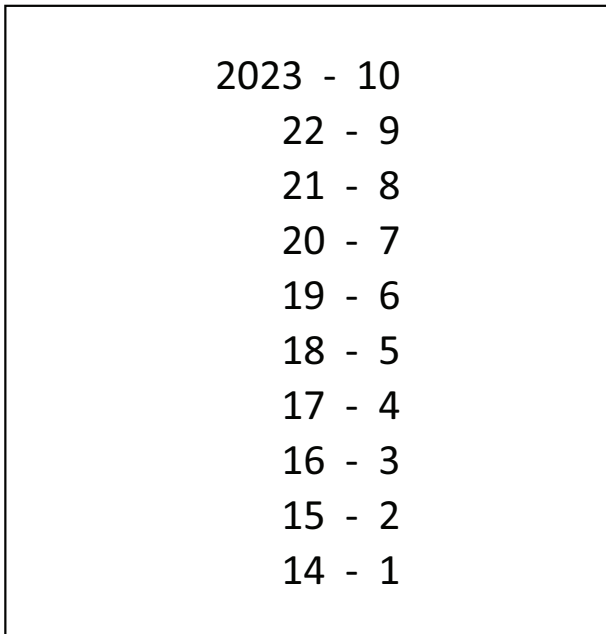


Figure 3.

Understanding the process

With this thought process through writing, students understood that they should work backwards from their current age towards the birth year to know their age in a particular year. Though this seems to be common sense, not introducing students to such basic logical reasoning skills makes us reflect upon the quality of education in general, and of mathematical dialogues, in particular.

I continued to narrate the story. Students came across one more clue from the story where they

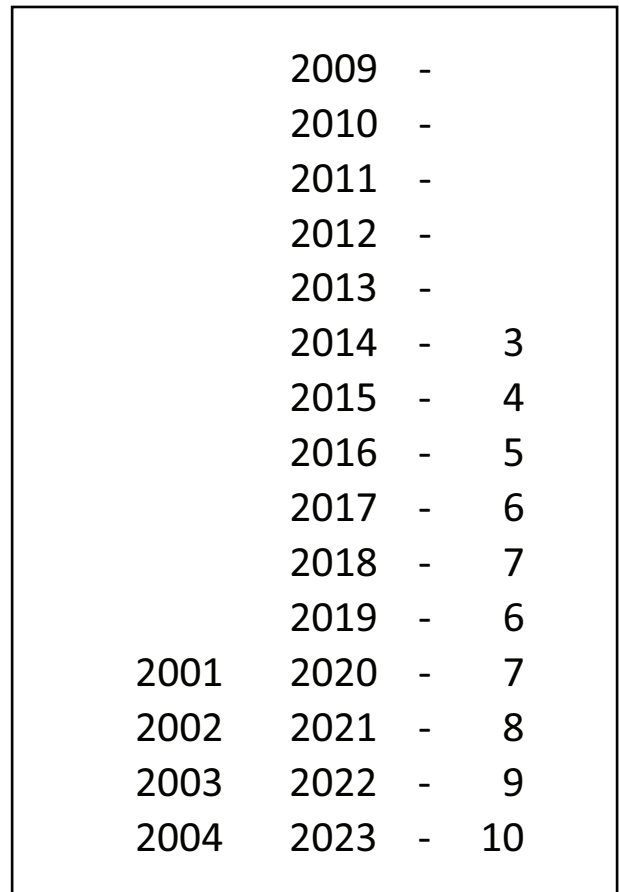


Figure 4.

got to know that the grandmother's age would be 81 years in 2023, now, what would be the year of her birth? Surprisingly, many children did the right operations and wrote their answers in their own way. As a narrator, I was mesmerised not by their doing the operation, but by the way children tried to write their answers in their notebooks. It was not the traditional way of noting the numbers and writing the answers below them.

As we see in *figure 5*, a student tried to subtract 81 from 2023. Since the aim was to find out *Muttajji's* age, a few students did not write the grandmother's age separately but wrote it in a vertical tree of mother, grandmother, and great-grandmother.

In every step of finding the answers, students were becoming inquisitive about what would come next and how they would tackle it. As I proceeded with the story, children found another clue - the great-grandmother gave birth to her five daughters one after the other, every two years after her marriage. Then, students started subtracting the number 2 repeatedly from the year 1942.

In the discussion, students themselves expressed that since the great-grandmother had five

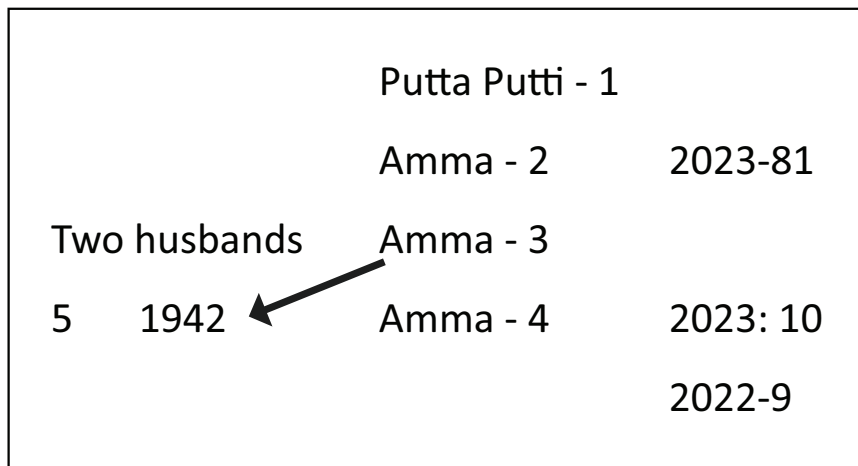


Figure 5.

daughters and the fifth daughter was born in the year 1942, we would get the birth year of siblings of the grandmother by subtracting 2 from 1942 for 4 times, because there is a 2-year gap among the daughters of Muttajji.

Without using signs of subtraction, students processed their thoughts in the notebook as in figure 6. This tells us that as we reinforce the methods of calculation, we tend to come up with the solution with our intuition by avoiding the steps. For example, figure 6 indicates that the fifth daughter of the great-grandmother was born in 1942 and the student continued the subtraction of 2 from 1942 until the third daughter. The student skipped the calculation for the second daughter and finally jumped to the first daughter which they felt was important to find out the age of Muttajji. Then, they found that the birth year of the first daughter is 1934 (1942 minus 8 if there are five daughters with a 2-year age gap each).

Now, I asked students what they should do to move towards the age of Muttajji. A few students said

they should subtract 8 from 1942. One student said they should add 8 to 81 (the age) which means that Muttajji is more than 89 years old. Students started guessing Muttajji's age now. They recalled another clue that was given during the story narration which hinted that Muttajji did not have a child marriage. Hence, students added 16, the age when she got married (the minimum age of marriage was 15 years in those times). They added 16 years to 89 and said that Muttajji's age could be 105 years.

A student logically thought that Muttajji must have waited one to two years before having her first child in 1934. Later, collating all the clues that they were given, all of them added 2 years to 105 and declared that Muttajji's age could be 107. All of us agreed that Muttajji's age would be 107. Finally, they subtracted 107 from 2023 and got the birth year of Muttajji.

As we have seen here, engaging students in a story through discussions and logical reasoning using real-life contexts arouses their curiosity and motivates them to solve maths problems.

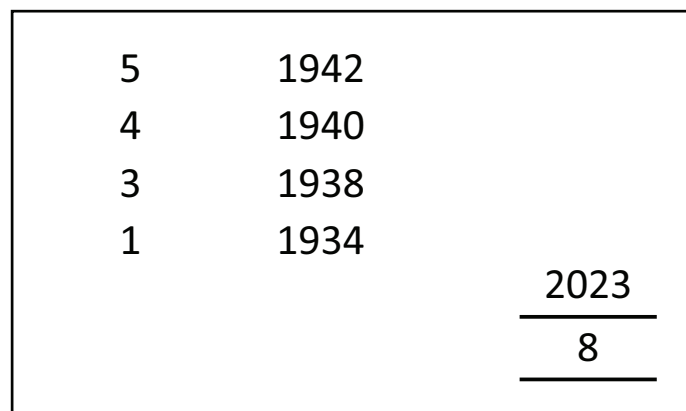


Figure 6.

Note: Images of children's work included in the article have been recreated for use in English.

Endnotes

- i This story is set in 2016 when it was first published. The age of *Muttaji* has been changed to use the story in a class in 2023.
- ii Also known as Krishna Raja Sagara Dam.

References

How Old is Muttaji? Written by Roopa Pai; Illustrated by Kaveri Gopalakrishnan. Pratham Books. <https://storyweaver.org.in/stories/5699-how-old-is-Muttaji?mode=read>



Ranganath is a Resource Person with the District Institute, Azim Premji Foundation, Yadgir district, Karnataka. He enjoys teaching maths in fun ways using stories, problem-solving methods and puzzles. He enjoys reading contemporary non-fiction books. He may be reached at ranganath@azimpremjifoundation.org

When we select a book to read to or discuss with children, we must ask ourselves, 'What is so special about this book that will connect with the children and also give them a different perspective, or some new ideas and opportunities to think about?' It is similar to the notion that by reading literature, we become 'new'; that we are no longer the people we were. This is the pleasure of a good book. It is also possible that a specific book may come to occupy a special place in their long-term memories; one that cannot be forgotten.

Kamlesh Chandra Joshi, Lightning (Big Book) | The Story in Class, page 35

We are aware of the significance of children's literature in the development of linguistic skills in the primary classroom. Poems, stories, illustrations, references, a variety of characters, etc. are all included in good children's literature, depending on the learning level of the children. Children's literature of today contains references to diverse social, economic, and environmental contexts. As a result, its application is not confined to particular objectives; it allows us to apply it in a variety of ways. In a way, it is a method of comprehending the world.

While teaching primary classes, creative teachers make use of stories, anecdotes, poetry, and situations to build curiosity, inspire and discover new things, and encourage children to pursue their curiosity. However, viewing children's literature merely for the development of linguistic abilities diminishes its significance. If any literature or book is included in the classroom teaching process, it creates opportunities not only for the development of linguistic skills but also skills inherent in other subjects. We can generate opportunities for such development of the aims and abilities inherent in Environmental Studies (EVS) in our class by using the situations, events, and characters provided in any narrative or poem.

Specific example

I would like to illustrate my point with the example of a book published by *Eklavya*, as part of the Avehi-Abacus Project.ⁱ The title, *Balti Ke Andar Samandar*ⁱⁱ (Ocean in a Bucket), explores many water scenarios in a very interesting way. It depicts not just the consumption of water, but also the entire journey of water.

Let us try to understand why this book is such an important resource in the teaching of EVS.

The water narrative begins with the character, Sonu's, bucket. It explores where the water in Sonu's bucket comes from – starting from the sea and continuing with the sun, clouds, mountain, river, lake, pipe, and ending with the tap. Then, it continues with the cycle of water seeping into the ground from Sonu's bucket and, finally, rejoining

the sea. It is tough to envision such a subject in a poetic and imaginative way. Often, the way such themes are presented in our classes is formulaic, where the subject matter is limited to specific points such as definition, importance, process, and so on. This is where the book stands out and shines. As the narrative continues, other characters are introduced. The story flows well with the pages and lines well connected. We can understand it better with an example:

*This is the river
that flows into the lake,
whose water is still
and gets into the pipe
drips from the tap
and fills Sonu's bucket.*

*This is the mountain
from where the river runs into the lake,
whose still water
enters into the pipe
drips from the tap
and fills Sonu's bucket.*

This sequence is reflected not just in the words but also in the illustrations. The images in the book are diverse and engaging – whether it is Sonu's house or the course of water flowing across several locations. The surroundings, landscape, and activities have been meticulously captured in the pictures. The picture sequence also depicts life in many settings. The life cycle is not confined to humans; also seen are animals, trees and plants, workers, the structure of dwellings, and other settings. The visuals appear to progress along with the story in the book.

Using the book for EVS

As previously stated, we can create possibilities for skill development and achievement of the objectives of teaching environmental studies with the help of this book. Let us look at it this way: the EVS syllabus incorporates water as a theme. Many lessons about water can be found in the NCERT or any other state textbook from classes III to V. It is

envisaged that the activities and exercises included in these lessons will familiarise the students with the sources, uses, importance, cleanliness, conservation and value of water, as well as make children sensitive to these concerns around them. We can support this process by using children's books in our classrooms.

We will try to comprehend this in a few steps with the help of this book.

Discussion

The teacher can begin by asking about the title of the book, *Balti Ke Andar Samandar* – is it possible that an ocean can fit into a bucket? Many children may be unfamiliar with the ocean. Children will be able to grasp the idea of an ocean by means of classroom interaction on this story. Similarly, dialogues can be utilised to help them understand the new terms presented in the book. Talking about the illustrations in the book will be of use to children in making connections with the text. The teacher could try to make the conversation relevant to the children's contexts and provide examples as well as give them opportunities to imagine and understand new contexts.

Observing and connecting

This book not only explains the voyage of water, but it also connects to other concepts. The book has a wide range of illustrations, including those of animals, plants, trees, ways of living, activities, clothing, and so on. Children could be assigned the activity of sorting and generating a list of various items while looking at the pictures in the book. In addition, differences and similarities in other environments might be discussed with the children.

Relating events to their surroundings

One of the primary goals of teaching EVS is to help children understand the world by understanding

the content via their surroundings. They can use what they already know to move towards new knowledge. In such a case, while teaching children, it is vital to foster processes that aid in the construction of new information. For this story, this can involve understanding the nearest water sources, observing and comprehending the changes that are occurring in them, as well as knowing about other new sources that are not present in their area, for example, understanding rivers and seas through water tanks and lakes.

Project work

Project work can be assigned to children in groups or individually. For example, discovering nearby water sources, gathering information on domestic and other uses of water and determining where the water comes from in their village, locality, or town, are some subjects that can be explored. To collect related information, the teacher can work with students on skills such as questionnaire preparation, interaction with others and observation. Finally, the children's findings could be documented and presented in class. These types of assignments allow children to comprehend the topic by relating it to their own experiences.

Other resources

This is an example of a single book. Other books explore similar events and topics relating to the environment and the world around us in a more comprehensive manner. For example, *Beej Boya* (Eklavya Publications), describes the order in which a plant and fruit emerge from a seed. In contrast, *Mor Dungri* (Jugnu Prakashan) depicts the exodus from villages to cities as well as the bond between humans and animals with tremendous sensitivity. It is essential that, in addition to the textbook, such resources be included in the classroom.

Endnotes

- i AVEHI ABACUS PROJECT (AAP) aims to strengthen the quality and content of education in primary schools. <http://www.avehiabacus.org/>
- ii *Balti Ke Andar Samandar*. Avehi-abacus. Illustrator: Deepa Balsawar. Eklavya. <https://eklavypitara.in/products/balti-ke-andar-samandar>



Shweta Vishwakarma works with the Chhattisgarh Team of the Azim Premji Foundation in Khargone, Madhya Pradesh. She has been part of field-level engagements with teachers and the material development processes related to language teaching and learning. Prior to this, she was with Muskaan, Bhopal. She has completed her MA Education from Azim Premji University. She is fond of children's literature and likes to explore and understand how it is being created in different contexts. She may be contacted at shweta.vishwakarma@azimpremjifoundation.org

Popular Stories in the Science Classroom

Venkata Naga Vinay Suram

And thus, the crow quenched its thirst and flew away happily.

The hare realised its mistake and accepted defeat to the tortoise.

He went out running the streets, straight out of his bathtub, shouting, 'Eureka – Eureka'.

These lines ring a bell for most of us as lines from stories we have heard or read as children. Most of us enjoy a good story but stories have a great pedagogical value too, especially in a science classroom. If we define science as efforts to understand the world around us by exploring and drawing relationships between different elements involved, then science teaching in a classroom should also pave the way for the student to practise and realise the value of exploration, recording, and analysing the observations made, and drawing relationships among the multiple components involved.

Encouraging children to participate in such a process while sustaining their interest can sometimes be a challenging task. A good story could come in handy in such times, not just to initiate a discussion, but also to encourage the students to participate in the process. Stories and storytelling could also be used as tools to strengthen existing learnings and for assessment. Along with this, asking the students to develop narrations around their observations or experiences, enriches their communication abilities. The language that stories use is often connected to the students more than the scientific vocabulary is. To illustrate this point, I would like to share two experiences of using stories while teaching. These have been tried out with participants of different age groups – primary and upper primary students, slightly tweaking the concepts as per their cognitive level.

Some stories as pedagogy

The Thirsty Crow

Objects exhibit different properties under different circumstances. Some objects float, some sink, and a few are suspended between the top and

bottom when placed in water (or any other fluid, as a matter of fact). What causes these objects to behave in this way could be explained in terms of relative density. Understanding relative density requires familiarity with the concepts of volume, mass, and density. An effective pedagogy of such a concept should involve providing hands-on experience to the students wherein they observe the behaviour of different objects when placed in water and draw inferences. The launching pad for such an exploration should encourage students to participate in the learning process with as much enthusiasm as possible so that students can experience the process of inquiry. And this is where the story of the thirsty crow comes into play.

Most of us know this story, but to help you recall, the story goes like this: On a hot, sunny day, a crow in search of water spots a pot with a little water at the bottom. The crow begins to drop stones into it, one by one. The water level begins to rise. The crow keeps dropping the stones till the water reaches the top. The crow drinks the water and flies away happily. The story offers some interesting possibilities for initiating a discussion in the classroom.

It was tried out in a classroom; the discussion started with the following questions:

- Why did the crow pick up stones? Why did it not pick up any other object, such as sticks?
- How much water was in the pot initially? Would the water rise to the top if the initial water level is very low?
- Why did the water rise?

Most of the students wanted to try out what the crow had done. I arranged a few glasses, markers to mark the level of water, and a bucket of water. They ventured outside the classroom to pick objects of their choice. Most of them picked stones of various sizes. They repeated what the crow had done and observed the change in water levels when the stones were dropped into the water. While they were conducting the activity, I asked them to also vary the amount of water in the glass, and then

compare the observations. The whole classroom was filled with enthusiastic ‘crows’ trying all kinds of things – experimenting with different levels of water, different sizes of stones, and different kinds of objects too, some of which were floating. When I asked them to share their observations, the responses brought a variety of aspects into the discussion. I have listed some of the responses below:

- When the quantity of water was very little, it did not come to the top of the glass, despite dropping several stones.
- Pebbles were not uniform in size and shape. This caused issues when the pebbles were dropped into the glass.
- The irregular shape of the stones caused gaps when they toppled over one another causing water to flow into those gaps.
- Smaller pebbles collectively contributed to raising the level of water effectively. Even though larger pebbles raised the level of water, the gaps between them were large and, therefore, not as effective.
- Pebbles of uniform shape and size which align themselves to the shape of the container increase the level of water, whatever the initial quantity.
- Objects like styrofoam balls and sticks did not increase the level of water effectively. The rise in the water level was far less in comparison to the stones.

Leaving the discussion of the validity of the above responses for another time, these responses touched upon multiple factors, such as the shape of the pebbles and the container, the effect of the size of the objects on the change in the level of water, types of objects that contributed to the rise, and resulted in a vibrant discussion in the classroom. The participants seemed to be owning the learning process, thus, representing a participatory learning experience. The story set an effective launching pad to initiate the discussion and explore the floatation properties of objects in greater detail.

I tweaked the process while conducting the same activity with another group of participants. Rather than asking them to start with recreating the activity, I asked them to draw the story in simple pencil sketches to see how they represent the initial level of water in the pot and the subsequent changes in the level. I then asked them to start the activity with the same level of water as drawn by

them in their sketches.

The Hare and the Tortoise

A phenomenon can be represented in multiple forms, for example, the motion of a vehicle could be depicted in terms of pictures, tabular columns having the position-time readings, and in terms of a graph. Each form of representation has its own advantages. Representing a phenomenon in a graph is a critical point for many participants, and I have used the story of the hare and the tortoise to further students’ understanding of graphs. Representing this story on a position-time graph is an interesting exercise for it enables the participants to consolidate and validate their learnings.

In short, the story was: A hare and tortoise compete in a race. Initially, the hare speeds up, and being extremely confident of winning, stops to rest, eventually falling asleep. The tortoise on the other hand maintains its steady pace and reaches the finish line first.

While conducting the activity in the classroom, I asked the students to draw a simple position-time graph that would represent the story. I went around the classroom while they were drawing and noted down some of the most common plots. The responses from the participants were used to discuss and arrive at the corresponding representation of the story on a graph.

Once they completed the task, I asked them to focus on some of the key pointers from the story and ensure that the graph depicts it. For example:

- What does it mean to ‘win’ a race?
- How would you show that tortoise won the race?
- How would you depict the phase where the hare was sleeping?
- Would you prefer to draw two different graphs – one each for the tortoise and the hare?
- How would you show that the hare had a good start?

The class analysed their graphs based on their discussion of these points. Connecting each pointer to a concept in a graph was the crucial element. For instance, ‘winning a race’ on the graph would translate that the time value for the winner is less than the other, and the sleeping phase of the hare would be that portion where there is no change in position, despite the increment in time. The activity made much sense to the participants as they could

draw the correlation between the language of the story and the mathematical vocabulary of the textbook, which might not have been possible if the maths concept was discussed conventionally.

Points to ponder

One of the key challenges in using the story in a classroom is to create the students' interest in the story and sustain their enthusiasm while connecting the story with the chosen concept. While ensuring that as much space as possible is allowed for their

responses, care should also be exercised to ensure that the focus is not diverted. Choosing the right story is another challenge that one encounters. The criteria for choosing the right story is not just limited to its connection to the concept, but also to guarantee that, while providing sufficient learning opportunities to inquire and investigate, the story should not encourage any bias, nor strengthen stereotypes. Sometimes, narrations around regular day-to-day experiences also help in achieving the desired effect.



Venkata Naga Vinay Suram completed his master's in Physics from IIT Roorkee in 2013 and joined the Azim Premji Foundation. He has been working with government school teachers to make science learning more experiential for students. This has included developing modules around concepts in science and orienting teachers to take these to their classrooms. His academic interests include history, philosophy of science, neuroscience, and science education. He may be contacted at vinay.suram@azimpremjifoundation.org

All in all, when we use art for storytelling, it leaves a strong imprint on the minds of children, especially learners who learn better with a representation of the oral story. Using art not only provides a huge scope for possibilities but also makes space for building unconventional logic to support the ideas. Since art is a representation of a culture, children learn about pluralism and apply their own cultural interpretations to the artwork.

Abhilasha Awasthi, Telling Stories Through Art, page 12

How to be a Good Storyteller

Rajesh Utsahi

All of us, particularly children, enjoy listening to stories. When I think back on my childhood, I recall my grandmother's stories. In our house, we would use a coal burner to keep warm in winter. All the children used to gather around the stove late at night to keep themselves warm. In the summer, we would meet on the cots stretched out in the courtyard of the house. This was when grandmothers (both paternal and maternal) would tell us stories. They used to have a great memory for stories. We would fall asleep while listening to the story and if a story was left unfinished, there would be a request to narrate it again the next day. This was the period when TV did not exist. Mobile phones were nowhere in the picture; in fact, landline phones were also not commonly found in households.

But, in recent years, the entire scenario has changed. Even regular TV programmes have been replaced by those on the OTT platform. Perhaps grandmothers are now narrating stories with the help of mobile phones or television. There are numerous channels, blogs, and websites where videos, podcasts, and audio stories can be found.

Vanya, my two-and-a-half-year-old granddaughter is with me at present. She listens to and watches numerous such stories and poems prepared specifically for children on *YouTube*. She also states her preferences and dislikes.

The value of reading aloud

Mobile phones are so easily accessible, there may not be a conducive setting for reading or listening to stories at home. However, even in this scenario, the value of storytelling in school remains unchanged and the art of storytelling has grown in popularity as a valuable tool in classrooms. Storytelling has also become a specialised field and there are professional storytellers who hold special sessions at schools. Eminent educationist Krishna Kumar, in an essay on the art of storytelling, writes that the problem of retaining children in school could

be solved to an extent if our primary schools had a separate storytelling session every day during the first two classes. He says that he envisions a day when every teacher teaching young children will be expected to master at least thirty traditional stories. By mastering, he explains that he means they should be able to recall these stories with ease and confidence. He further adds that for a society with an extensive heritage of thousands of stories, this is not difficult. Thirty such stories, which the teacher can tell whenever they like, will transform the mood of the first two periods of the primary classes. The sole need is that storytelling be given a respectable place in the everyday curriculum.

This view is also underlined in the National Curriculum Framework (NCF) 2022 for the elementary stage.

'Stories are a window to the world for children. They are fascinating, beautiful, enchanting!! Listening to stories is great fun and young children, particularly, love to listen to them. Stories told with feeling, with gestures and animated expressions are magical and take your breath away. Every word becomes an experience in itself.

Stories are a particularly good medium for learning about social relationships and ethical choices; understanding and experiencing emotions; and becoming aware of life skills. While listening to stories, children learn new words thus expanding their vocabulary, they also learn sentence structure and problem-solving skills. Children with very short attention spans concentrate for a longer time while engrossed in a story. Through culturally contextual stories, we can acquaint children with their culture, and social norms and create awareness about their surroundings.'

Classroom use of storytelling

Storytelling as a pedagogy is mostly used for children in pre-primary classes, who have not yet learned, or are learning, to read on their own. However, listeners can also be those who know how to read but have no desire to do so.

There are a few things to keep in mind, whether you are a teacher, (or a parent, or simply attempting to master the art of storytelling as a hobby). First and foremost, it must be determined why the story is being told and what its aim is. Broadly speaking, the goals can be:

- Keeping the children entertained
- Keeping the children interested in the story
- Arousing children's interest in reading
- Communicating a specific concept or value to children
- Helping children overcome their reluctance to speak
- Teaching children to come forward to ask questions and participate in discussions
- Promoting imagination and visualisation in children
- Helping them develop skills of presenting problems

Where can I get the story?

A story can be picked up from anywhere. However, your goal will also influence where you get the story from. Our traditional stories are the best resources. Folklore is the most abundant source of these. One of the unique characteristics of folklore is that it evolves in accordance with the environment and culture, while the basic text stays unchanged. As a result, it is easy to remember, and it does not follow any set pattern. Sources such as the *Panchatantra* and *Jataka* tales are good. Nonetheless, it is equally critical to understand what not to choose. Avoid stories that make fun of others, give moral lectures, promote ghosts and superstitions, or express disdain for constitutional values.

Where do I begin?

- Begin with whatever story you recall, have heard from someone, or read somewhere. See how the children react to it. You can think up the next story based on that reaction.
- Read a story from a book.
- Consult with the children. If they remember one, they can narrate it.

- Ask the students what they saw on their way to school or an incident that may have occurred the previous day that they would like to share with the others. This type of activity will help children develop their ability to express themselves.

Practice makes perfect

Storytelling is an art. You can gradually improve your storytelling abilities. You can modulate and change your voice when telling the story to fit its characters. You can create your own facial expressions. You can also tell your story while walking around if there is space in the classroom. Take care not to make any gestures or sounds that frighten the children. If the story is engaging, the children will pay close attention to it. If the children are not interested in listening to the story, you must devise a fresh technique. One approach is to narrate the story in a style that allows for dialogue with the children. Ask children what will happen next in the story. Another approach is to connect the story to the children's surroundings and daily lives.

There are some stories that children love to hear over and over again. It is easy to tell such stories. Every time, you can recount the story in a different way. It can also be expanded with new aspects and contexts. In this sense, I would like to offer an experience. I have two sons. My father used to make up stories for them when they were young. He created the character *Laat Saheb* and would narrate a new feat of this character every time. The interesting thing here was that his listeners, namely, my sons, tended to add something of their own in between. That means they used to imagine things based on the persona of *Laat Saheb*. You can also provide these possibilities to children.

Aside from that, it is crucial to note that though every story has a predetermined ending, it is not necessary that you adhere to it. You can leave the ending a mystery for the children by not disclosing it to them. Alternatively, invite children to come up with multiple endings. They do not have to do this right away; you can give them some time or ask them to come up with an idea the next day. Avoid phrases like, 'What is the moral of this story? Or 'What does this story tell us?' Even if something like this is mentioned in the story, allow the youngsters to experience it for themselves.

When you begin telling the story, the children's reactions will give you hints as to which story to tell the next time. You will also be required to

keep reading stories in order to select good ones. However, these are only preliminary points. To

become a good storyteller, you must constantly practise, learn, and experiment with new methods.



Rajesh Utsahi is Senior Hindi Editor with Azim Premji University's translation initiative, *Anuvada Sampada*. He edits the Hindi-translated editions of the University journals Learning Curve and i wonder.... He has been the Hindi editor of the Azim Premji Foundation's Teachers of India portal for almost 12 years. Prior to this, he has worked in various roles with *Eklavya* for about 27 years. This also includes editing the children's science magazine *Chakmak* for 17 years. He may be contacted at utsahi@azimpremjifoundation.org

Teachers should share stories from their region. To get more of these, they can ask the students to ask their parents to tell them stories of the region. Storytelling traditions of families should be recognised and encouraged before they die out completely. The gap created by a lack of good literature to engage with, is unfortunately being filled by 'news stories' that we are constantly bombarded with through TV and phones.

Valentina Trivedi, How Stories Nourish Children, page 3

Power of Stories in Language Learning

Sharoon Sunny

The fact that our brains are more engaged when we listen to stories is widely accepted and is an area of research. Yet, the question still remains: why does the narrative structure of a story, where events unfold in a sequential manner, have such a profound impact on our learning?

The answer is quite straightforward: our brains are inherently wired for stories – telling and listening. At the heart of every story is a series of cause-and-effect connections, which is the type of sequential thinking that is the basis of how we naturally process information. Whether we are carrying out daily errands, working, or spending time with our loved ones, we constantly construct, even if only briefly, stories in our minds to make sense of our actions and interactions. Storytelling taps into our natural inclination for sequential thinking and helps us process and retain information more effectively. This is particularly true for very young children, whose brains are still developing and are highly receptive to new information and experiences. It exposes them to new ideas, concepts, and experiences, and they learn about cause-and-effect relationships, problem-solving strategies, and the consequences of actions. They also develop language skills, vocabulary (which improves learners' ability to recall and use new words in context), and a deeper understanding of emotions and empathy.

The focus of this article is to understand why integrating storytelling into everyday classroom activities to teach content can be an invaluable tool to enhance student learning by supporting language development in young learners.

Before going deeper into an explanation of why storytelling was, and continues to be, important for young learners, a definition of storytelling is necessary since it is different from reading a story aloud or other types of performance reading. Several definitions abound, but one that appears unambiguous is Roney's (1983) where he suggests that 'In its most basic form, storytelling is a process whereby a person (the teller), using mental imagery, narrative structure, and vocalisation or

signing, communicates with other humans (the audience) who also use mental imagery and, in turn, communicate back to the teller primarily via body language and facial expressions, resulting in the co-creation of a story.'

In primary language classrooms, storytelling is a dynamic and versatile practice that typically unfolds across three distinct stages.

Stages of storytelling

First, pre-story activities entice and engage children with the story while also introducing or reinforcing pertinent language and vocabulary. Next, during-the-story activities sustain children's attention, guiding and supporting their comprehension of the tale. Finally, post-story activities encourage children to actively employ the story's language and share personal responses.

Through these stages, children cycle through the different phases and go through a process of revision of not just content but, in many ways, storytelling is a holistic approach towards cultivating a deeper understanding of language, expanding their vocabulary, and developing critical thinking skills, all while enjoying the captivating power of stories.

Sometimes teachers assume that, by default, their classrooms provide opportunities to use and hear rich language. This is not always true. Teachers need to make intentional plans that integrate language associated with literacy learning (Flynn, 2016), and one such activity is storytelling. During story circle activities, teachers have the opportunity to, for example, promote activities such as wordplay, rhyming, onset and rime,¹ and isolating various sounds within a word, leading to a child's well-developed phonemic awareness and, eventually, good abilities to spell and decode (Soderman et al, 2013).

Once a child acquires about 50-100 words, language develops quickly (Soderman et al, 2013). Children tend to show fluency in speaking around

the age of four or five, with a very high success rate (Bryen, 1996; Cambourne, 1986). Speaking is a child's strong suit, but the language used in communication is more functional than academic. They are using language rather than analysing it. In general, storytelling fits perfectly with these notions because it is primarily oral-language based. It utilises a child's oral language expertise in a functional rather than academic way and, therefore, is accessible to every child.

As a learning tool, storytelling can be used for sharing content in all areas of the curriculum, but it is of great value especially in the English language classroom since it builds awareness of print literature. During story time, children follow along as the teacher reads slowly with her finger moving along the pages of the book. The first step to decoding words is to understand that the text on a page generally tends to move from left to right. Children can also be invited to be co-creators in the storytelling process.

Storytelling allows for a language-rich environment. It has considerations for opportunities that allow students to use language in extended turns (back-and-forth conversations between an adult and a child) and to elaborate on ideas. For instance, when adults in the child's immediate learning environment use longer, more complex utterances and syntactically complex language, it cascades to children picking up the ability to speak in extended turns and using syntactically complex utterances. This type of learning is important because children use context cues, including cues provided by sentence structure, to learn new words. Familiarity with diverse syntactic forms predicts language comprehension and is ultimately related to reading comprehension.

This acquisition is followed by adding action verbs and simple formulaic phrases (*I want, Stop it, Don't want that, Please*). Once there is sufficient receptive vocabulary and evidence that communicating with others is occurring in its most natural form and there is encouragement and opportunities for practice, children are usually on their way to rapid advancement (Kostelnik, Soderman, & Whiren, 2013).

Familiar ground

It is very important during these early stages for

teachers to ensure that children hear, see and read what is familiar. As an example, in a classroom, what is being read in the form of a story must also support what is being discussed in circle time or during small group interactions. Take a story like the following:

One bright morning, as the sun smiled down on the earth, a small seed that Meena had planted in her garden, came to life. The tiny leaves of the sapling pushed and pushed against the black soil, and one day, as they pushed, two green leaves came out of the seed pods. Meena watered them every day and soon the sapling became a plant. As the plant grew, she noticed a small bud on the very tip of the plant. As days went by, the bud began to slowly open, and one fine morning, Meena was greeted by a bright yellow sunflower.

This story can be used not only to teach content but also language. One way is to create an attribute chart. Attribute charts are powerful tools that help children build expressive vocabulary and learn words in a language they are trying to acquire. In the above story, the teacher can show students a real sunflower, have students plant their own seeds and watch them grow. All of this can be done through the mode of a story. Through an attribute chart, a teacher can elicit not only words related to science but also words that describe the flower such as 'beautiful', 'yellow', 'bright' and so on. Of course, there are multiple ways in which a story can lend itself to learning.

Stories and storytelling are particularly effective when teaching English to young learners because they provide clear and unambiguous language in real-life contexts. Additionally, stories are motivating and inspire children's imagination, enabling them to make connections across different subjects. When using stories, learners can easily access contextualised language because it is presented in a familiar context, supported by illustrations and drawings. By placing language in a specific situation, learners can better understand the meaning and context of the language used. This approach to teaching English creates a more cohesive learning experience that helps students connect language to their everyday lives.

One essential skill that young learners often develop naturally, but may not receive explicit instruction in, is listening. Listening is arguably the most critical skill for young learners to cultivate. Children have already acquired this specialised skill before they enter the classroom, as listening is a fundamental

aspect of learning to communicate. Storytelling is an effective way to capitalise on children's established listening abilities and integrate them into the learning process. Teachers benefit from this advantage, as they can focus on developing what students already possess, much in contrast to the skills of reading and writing, which require formal instruction and multiple interventions.

Listening is not a passive activity; it demands significant cognitive processing. When children listen to a story, they must process what they hear and see, as well as comprehend the

language and content being presented. To help children understand the story, teachers should allow for 'thinking time', so that they have the necessary time to carry out the complex linguistic and cognitive processing required.

Storytelling is a vital tool that supports language learning, and it is important for teachers to keep utilising this timeless tool. Storytelling does not require sophisticated technology or expensive storybooks. Instead, teachers and students can collaborate and co-create stories from their daily experiences to create a rich learning environment.

Here are a few storybook recommendations for various ages that are themed around the natural world:

The Poop Book by Tejaswini Apte and Sujatha Padmanabha Kalpavriksh

The Monster Who Could not Climb a Tree by Tanya Majumdar Kalpavriksh

Vatsala Loves Snakes by Arthy Muthanna Singh and Mamta Nainy, Karadi Tales

The Insect Boy by Shobha Viswanath, Karadi tales

Dorjee's Stripes by Anshumanni Ruddra, Karadi Tales

Endnotes

- i Onset-rime is the process of breaking or separating words into two parts: onset is the initial phonological unit of any word, and rime is the string of letters that follow. Rime usually consists of a vowel and a final consonant sound.

References

Bryen, D N (1982). *Inquiries into Child Language*. Boston, MA: Allyn and Bacon

Cambourne, B (1986). "Rediscovering Natural Literacy Learning: Old Wine in a New Bottle." Paper presented at the E.S.L. Conference, Singapore

Flynn, E E (2016). Language-Rich Early Childhood Classroom: Simple but Powerful Beginnings. *The Reading Teacher*, 70(2), 159–166

<http://www.jstor.org/stable/44001420>

Roney, R C (2009). A Case for Storytelling in the K-12 Language Arts Curriculum. *Storytelling, Self, Society*, 5(1), 45–54. <http://www.jstor.org/stable/41943299>

Soderman, A K, Clevenger, K. G., & Kent, I. G. (2013). Using Stories to Extinguish the Hot Spots in Second Language Acquisition, Preschool to Grade 1. *YC Young Children*, 68(1), 34–41. <http://www.jstor.org/stable/42731300>



Sharoon Sunny is an ELT professional and teacher trainer. As a creativity researcher and teacher of writing, she tries to find the thin line that brings together creativity, elegance and simplicity. She teaches at the Azim Premji University, Bengaluru and can be reached at sharoon.sunny@apu.edu.in

Children's literature — oral, performative and written — has the capacity to welcome children into the world of pleasure, imagination, emotions, creativity, curiosity, different cultures, play with language, empathy with human lives, and an understanding of self.

KathaVana, Azim Premji University, 2023

The children came in a big group, and I asked them to sit in a semi-circle facing me. Their keen, shining eyes looked expectantly at me. I slowly brought forward the book that was hidden behind my back. I showed them the cover page and with all the appropriate theatrical antics screamed, 'Catch that Crocodile!'. The group in front of me roared with laughter, and I knew the show had begun.

As part of our annual children's literature mela, *KathaVana*, I had set up a stall that had storytelling through a read-aloud as the activity. These children who came were conversant in Kannada, and I knew only Hindi and English. So, a colleague's help was

enlisted to translate into Kannada what I read aloud in English. Despite the language differences, the read-aloud interspersed with gestures, expressions, voice modulation, and other paralinguistic features led to reasonable comprehension and elicited thoughtful and exciting responses from the children. Their spontaneous reactions of shock, wonder, laughter and excited anticipation were the highlights of the session.

What is KathaVana?

KathaVana is an annual, bilingual, children's literature festival organised by Azim Premji University in collaboration with Azim Premji Foundation's Field Institutes in Karnataka. It is an initiative to work with government and low-fee-paying private schools to make the benefits of literature accessible to children from different cultural, socio-economic, and linguistic backgrounds.



Figure 1. Children at KathaVana, the annual bilingual children's literature festival.

Each edition of *KathaVana* is based on a theme with workshops, discussions, oral storytelling, read-alouds, puppet shows, meet-the-illustrator and other events around it. Some of the past themes have been 'Children's Voices in Literature', 'Teachers as Readers' and 'Nurturing Children's Response to Literature'. The festival enables children's access and engagement with children's literature and prompts them to explore it even after they return to their classrooms. Teachers observe and take back several ideas and ways of bringing literature into their classrooms.

Why storytelling?

Ever since human language came into existence, storytelling has been an important part of human life through a variety of oral and performative traditions, such as *dastangoi*, *harikatha*, *kalakshepam*, *yakshagana*, *kaavad*, *burra katha*, *kathputli*, *rabna chhaya*, *tolu bommalata*, etc. These oral and performative traditions are now rightly recognised as literature, and as children's literature when performed with children as the audience.

Several reasons merit the use of stories and telling of stories in a classroom that have led to their becoming an integral part of *KathaVana*. Some of these reasons are as follows:

Learning about oneself and the world

Storytelling allows children to look inwards and outwards, empathising with the characters and events in the process. Children become aware of the emotions, reactions, interests, and motivations behind their actions, and become familiar with cultures and people similar and different to them. For children, stories not only act as a springboard for imagination but also enable them to link the world of fantasy with the real world. Storytelling can provide a platform for them to think and reflect on issues important to them and help address themes universal to humanity. Above all, storytelling in a classroom makes it a shared social experience, leading to children's socio-emotional development where they laugh, worry, feel excited, become sad, or anticipate together as a group, building a community in the process.

Learning to think

Storytelling helps children develop the strategies of listening, planning, hypothesising, predicting, identifying patterns, and paying attention. They begin to implicitly use visual and audio cues, their prior knowledge of the world and the language to make meaning.

Learning a language

The frequent repetitions and exposure to similar patterns of language use in storytelling expose children to a speaking and narrative discourse, developing oral language, which is central to the development of literacy and language skills. Vocabulary, sentence structures, grammatical rules, pronunciation, rhythm, intonation, comprehension, and the use of language in particular contexts can also be introduced and reinforced.

As a pedagogical tool

Storytelling can provide a context for introducing and reinforcing different concepts across the curricular areas of mathematics, science, art, technology, and social sciences, making it a very useful pedagogical tool for teachers. Listening to stories is found to be fun and pleasurable for children and adults alike. Storytelling allows teachers to strategise children's participation and engagement in a classroom based on children's interests and motivations. This also makes space for individual differences, needs and diversity in a classroom and helps teachers respond to these.

Why is storytelling absent from classrooms?

Despite the educational value of storytelling, it continues to face resistance from teachers as several of them are unaware of the true value it holds in children's lives and learning. If they do understand its importance, they struggle to identify ways in which storytelling can become part of their classrooms and teaching-learning. This struggle can be around planning a lesson, managing time the constraints of a curriculum, or identifying the right kind of books and traditions for storytelling that are age- and learning-level appropriate. Some teachers also avoid storytelling because of their lack of confidence in their abilities to tell stories or read them aloud.

How *KathaVana* has helped

KathaVana has consistently worked with in-service and pre-service teachers through professional development workshops and discussions. Leveraging the theory-practice connect, teachers are systematically introduced to ways of bringing children's literature into the classroom, especially through storytelling. Some of the takeaways for teachers have been as follows:

Learning- and child-centred approach

Children's engagement with literature should not be passive - where teachers tell the story, explain

it through translation or summary and give its 'moral'. Instead, children need to actively engage with literature by making their own meaning, sharing their interpretations, predictions, and feelings, and responding in different creative ways. For this to happen, teachers need to select stories that have multiple interpretations and meanings, are rich in themes, align with children's lives and experiences, have relevance for children, respond to their interests and needs, and make space for age-appropriate and individual-based learning levels, making sure that the sessions are interactive and welcomes children's thinking and imagination. For example, at one of the story sessions, storyteller Maitri Vasudev read aloud *Granny Knits* by Uri Orlev, translated from Hebrew into Kannada by Ishwarchandra. To help children imagine, connect the story with their lives, think, reflect and respond with their meanings, she facilitated a discussion with questions, such as 'How did Ajji feel when her grandchildren pulled each other's strands of wool out? How do your parents/grandparents react when you break something in the house? Was Ajji's response similar or different from theirs in the story? What do you do when you are angry? Does your anger rise slowly like Ajji's, like an inflating balloon? Or is it sudden, like a bursting balloon?'

Extension and integration of curricular concepts

Storytelling can lead to other activities, introduce themes, and help teach concepts in other curricular areas. Storyteller Vanita introduced a story and used it as a starting point to help children create their own stories in the form of an accordion book along with supporting illustrations. Another storyteller, Priya Muthukumar, used stories, such as *Hakeem's Hiccups*, *Bisibelebath Pot* and *The Cat and the Fly* to talk about themes of community helpers, different regional food, nature, and animal behaviour.

Use of multimodality

Storytelling has a multimodal aspect, in which role play, props and drama can be used. It does not always have to rely heavily only on one's gestures and body language. Voice modulation and expressions can be supported through props and materials. For example, some storytellers (Umashanker Periodi, Gagan Yeyyadi and Anvitha Prakash) used puppets along with other props - dupattas, furniture, musical instruments, etc. - to tell stories. This encouraged children to make puppets of their own and tell stories through them directly or use them as props in dramas.

Creating bi/multilingual classrooms

Teachers have begun to look for ways to make multilingual classrooms a reality. Being a bilingual festival, *KathaVana* demonstrates how Kannada and English can seamlessly become part of the interactions. We have had students and resource persons who are comfortable with more than two languages, such as high oral language proficiency in Hindi or Urdu in addition to Kannada, and beginner-level proficiency in English.

The interactions are encouraged in any or all these languages during the sessions. For instance, the example I shared in the beginning leveraged our multilingual capabilities where students responded in a mix of Kannada, English and Urdu to my interactive questions during the read-aloud. We were able to negotiate meaning and comprehension using gestures and expressions. The importance was not placed on purity, fluency or accuracy but on children sharing their interpretations, feelings and ideas without any restriction posed on their language. The children, their thoughts and their languages took centre stage instead of the mechanics of language. Ashruti Seventra, another storyteller, did something similar with her read-aloud in English while displaying the book in Kannada over the projector. The follow-up activity required students to make illustrations based on the story. Students used multiple languages not only while responding to her questions in discussion, but also in labelling their illustrations.

Development of language

The usage of specific vocabulary; opportunity to model and practise pronunciation and intonation; and the development of oral language, especially of presentation through dramas and role play can facilitate the development of language skills of listening, speaking, reading and writing woven around storytelling sessions. Some ways of incorporating these can be by encouraging children to create their own story endings, make puppets based on a storyline, and write and enact parts of a story after listening to it.

Exploring connections with local traditions

KathaVana has always valued our rich cultural heritage and traditions of oral and performative literature. As the event is conducted within the context of Karnataka, participants get access to *Yakshagana* and understand the relevance of it as an oral and performative tradition. Teachers have been able to recognise how their local and cultural

traditions of *raagini*, *harikatha*, *pattachitra*, *blaveli reading*, *kaavad*, *pavakathakali*, etc., should also get a valid presence in the classroom to help children build a stronger bond with the community and culture and connect their lives inside and outside the classroom.

In conclusion

The biggest takeaway from *KathaVana* for the teachers, perhaps, has been the validation that children love to engage with literature. Children have explored books and participated actively in the sessions by responding to interactive read-alouds; telling stories through drama, puppetry and *Yakshagana*; writing poems and stories; drawing and role-playing.

Children continued this engagement after the

sessions when they borrowed books from the school or classroom library. Teachers were amazed by the sheer interest and participation of the students and their hidden talents. This helped them to organise their teaching materials and activities to respond to the needs and abilities of the children and bring literature into the language curriculum and classroom.

To enable access to literature for children, irrespective of their socio-economic background and cultural situations, there is a need for children's literature festivals, such as *KathaVana*, to grow in numbers in different languages across the country. It is imperative that we recognise the relevance of children's literature and storytelling in a child's life and make efforts to incorporate these as integral to the design of language curriculum and pedagogy.



Figures 2-3. Children engrossed in reading and other activities during *KathaVana*

References

- Azim Premji University. (2023). *KathaVana: Annual bilingual children's literature festival*. <https://azimpremjiuniversity.edu.in/kathavana>
- Barone, D. M. (2011). *Children's literature in the classroom*. The Guilford Press
- Bennett, S. V., Gunn, A. A. & Peterson, B. J. (2021). Access to multicultural children's literature during COVID-19. *The Reading Teacher*, 74(6), 785-796
- Ellis, G. & Brewster J. (2014). *Tell it again! The storytelling handbook for primary English language teachers*. British Council
- Huus, H. (1972). The role of literature in children's education. *Educational Horizons*, 50(3), 139-145
- Williamson, P. M. (1981). Literature Goals and Activities for Young Children. *Young Children*, 36 (4), 24-30



Sonika Parashar is a teacher-educator at Azim Premji University, Bengaluru. She teaches courses in language education and curriculum and pedagogy. She has experience and interest in pre-service teacher education, curriculum development, language in education, children's literature, pedagogy of different curricular areas and their integration, art in education, teaching children with specific educational needs and guidance and counselling. She may be contacted at sonika.parashar@azimpremjifoundation.org

Humanising Science with Stories

Veena Prasad

A teacher has to deal with a variety of personalities at the same time in the classroom. A science classroom, in particular, presents its own unique challenges. Some children are already inclined towards science and are eager to lap up all the knowledge the curriculum has to offer; some are more inclined to the humanities and may easily get bored with an overdose of facts and figures; some may be eager to learn, but find that their attention easily wanders; and a few others may have already learnt the concept and facts and are just bored.

As a science writer, I have found that using stories to explain the idea behind a scientific concept, as well as the history of how scientists figured it out makes for a far better experience – both for the writer as well as the reader, and by extension, for the teacher as well as student. Take for example the discovery of phosphorus. A science textbook would typically have some facts around it – its atomic number, when it was discovered and by whom, and its major uses and reactions. But consider the story of how it was discovered.

An alchemist named Hennig Brand, in his quest for the ‘philosopher’s stone’ was trying desperately to create gold in his laboratory. After failing many times, he got the bizarre idea that if he kept boiling urine, it might turn into gold. (Was it because of the colour, I wonder). He kept several pots of urine on the boil for a long time, until he managed to evaporate all the liquid and isolate a waxy substance that spontaneously caught fire when exposed to air. This was the element phosphorus (this word means ‘light-bringing’ in Greek), and Hennig Brand became the first person to discover an element.

This is a story I like for several reasons. One, it is a great way of grabbing the attention of children before moving on to the concept of an element. They are already curious to know. They are brimming with questions: *What is an element? How does one discover it? How do scientists know the techniques to isolate them? Were these techniques devised with the purpose of isolating a specific element? Did the isolated element find purpose after being*

discovered? (Phosphorus was the key ingredient in the invention of the safety match).

Another reason is that the scientist, or ‘discoverer’, becomes humanised. Here was a person who had an idea to achieve some objective, gave it thought and charted out a course, set up a laboratory to convert his thoughts into action, experimented, examined the results, experimented some more, changing course if the results demanded it, and finally ended up with something entirely different from his original goal. This is the essence of science – you experiment, note the results, and follow the path that the result takes you. You may encounter unexpected outcomes and your initial assumptions may all be proved wrong, but you continue anyway, guided by a combination of facts and intuition, driven by a dogged determination to figure out that problem you were trying to solve.

By humanising scientists, we make their work relatable to the students. Students are able to grasp the concept in a holistic manner, compared to a bland ingestion of facts. They may even be motivated to become scientists! At the very least, they will laugh at the ‘toilet humour’ in the urine experiment which, by the way, is a historical fact.

This brings me to a different type of science story – one that does not have any historical documentation. These are related to discoveries that were made so long ago that no one knows exactly how they occurred. Fire, wheel, pottery, weaving, and so on fall under this category.ⁱ

Fictionalised history

As a storyteller, I can take advantage of the lack of documentation for ancient innovations and fictionalise the entire path leading to the discovery. I can take the liberty of creating my own characters, putting dialogue in their mouths, making them interact with their world in interesting ways that finally lead to the breakthrough.

However, I am also mindful of the fact that scientists have put forward hypotheses on how these discoveries might have been made. These

hypotheses can be the basis for our story.

For example, it was most likely a fire caused by lightning that captivated early humans and made them want to explore and harness this energy. Teachers can encourage their students to imagine themselves as cave-dwellers who first encountered fire. *How would they react? Would they be frightened? Excited? How would they approach a burning ember in the forest? Would they touch it? Would they understand it might burn them? When did they realise that animals were scared of fire, and it could be used to keep them safe? And having realised this, how did they try to capture fire, and keep it burning safely? Was there a process of trial and error?* From here, teachers can introduce the ‘fire triangle’ – oxygen, fuel and a spark – the three components required to start a fire and keep it burning. Take away one of these and the fire is gone.

It can be noted here that traditional teaching usually starts with the fire triangle and there is a chance that students may end up memorising it without fully grasping the awe, the momentousness of this discovery that is so uniquely human in its ingenuity.

Power of the narrative

You may have noticed that there are two ways in which the story idea has been treated in each of the examples discussed. In the first example, the story behind the discovery of phosphorus has been narrated to the students, whereas in the second, children are encouraged to imagine the scenario of humanity’s first encounter with fire and make up their own stories. Both serve the purpose of opening up the minds of students and stirring their curiosity. The impact comes from the way the narrative is built.

The two key elements of a narrative are, *setting* and *characterisation*. Setting refers to the location where the story takes place. In the story about phosphorus, the laboratory is the setting. Characterisation refers to the people playing a part in the story, their motivations, and personalities. Hennig Brand, for example, is a character who can be portrayed as comical but determined. In the story of the discovery of fire, the human who first tries to touch fire can be portrayed as brave, and the one who learns from that experience is wise.

A visit to the beach can make a good setting for a story to introduce the concept of ocean tides. A group of observant children playing on the beach

are the characters in the story. As the sun is about to go down, the children notice that the waves are coming further up the shore, covering areas that were previously dry. Their parents are telling them to move back and play safely. They can venture out again the next morning when the sea falls back. *Why are the waves reaching further inland? And why do they recede after a few hours?*

The same beach setting could be used in a Chemistry class to explain how salt is made from seawater. You could revisit it in the Physics class to talk about altitude and sea level, and again in Biology class to introduce marine crustaceans. The narrative can have the constant refrain of observations made by the children and information or warnings provided by adults, and they start wondering. By creating a familiar visual and drawing their attention to a familiar occurrence, we pique their curiosity. We set their thoughts going along the lines of – ‘There is a *reason* for this occurrence. There is a *science* behind this.’

The teacher can then take the momentum forward by launching into the explanation of the science concept. Chapter completed!

Keeping the story narrative going throughout the year can have an additional benefit – every time the class gets bored or distracted, the teacher can invoke this story, perhaps in a different setting, and pull the children back into engagement mode.

The storytelling formula

Below are a few storytelling techniques that will help teachers quickly come up with stories. Additionally, some resources are given at the end of this article which can also be used to source stories.

1. You would need a main character (the protagonist) and optionally, a few supporting characters (limit this to two).
2. Define a beginning, middle and end for your story.
 - a. The *beginning* would deal with either of the following:
 - i. A problem faced by the protagonist
 - ii. A strange natural phenomenon witnessed by the protagonist and which he/she starts wondering about
 - b. The *middle* could be about either:
 - i. The protagonist trying to solve the problem
 - ii. The protagonist thinking about explanations for the strange phenomenon;

can also include experimentation and evolving thought

- c. The *end* might be about finding a solution – this can either be for the original problem or something totally different, but new and exciting anyway.

Of course, it is not practical to tell stories before introducing every single concept that we need to teach. It is necessary to strike a balance. We can perhaps tell a story to introduce an important chapter in the textbook, and once we have the attention of the children, take this momentum forward to the next concept. A few

classes later, we can introduce another story to reinvigorate the class. We can even use the same story with slightly different narratives to suit a variety of concepts.

To summarise, a storytelling approach to teaching science benefits in the following ways:

- Helps retention and recall
- Helps students to connect facts more meaningfully
- Bridges the gap between theory and reality
- Captures imagination and fosters original thinking
- Maybe ignites the spark in a future scientist!

Recommended reading

A Brief History of Nearly Everything by Bill Bryson

The Story of Science series by Joy Hakim

The Disappearing Spoon by Sam Kean

Teaching Science With Stories. UTA Online.

<https://academicpartnerships.uta.edu/articles/education/teaching-science-with-stories.aspx>

The Story Behind the Science. How Science Works.

<https://www.storybehindthescience.org/how-science-works>

Endnotes

- i These have been explored in *The Spark That Changed Everything* by the author.



Veena Prasad is the Director of Content and Communications at CrowdANALYTIX. Primarily a STEM author, she has dabbled in fiction, biographies and even the occasional song lyric. She enjoys tackling complex subjects and writing about them in simple and lucid prose. Her book, *The Spark That Changed Everything* combines fact and fiction to bring science and history alive. Veena holds a bachelor's degree in Computer Science Engineering and a master's in English Literature. She may be reached at veena.rp@gmail.com

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