

Teaching Maths Through A Story

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Friends, everyone loves to listen to stories. It is very easy to convey a concept or a message through stories. But we need to keep certain things in mind while using the story as a medium to teach concepts. There should not be any room for discrimination or cause pain in using children's names, family, social and economic background. Let us know more about this endeavor.

This is an account of an attempt made in February this year to clear the concept of perimeter to class five. A story was narrated that was connected to the environment of children. The children loved the story from the beginning to the end. This story had the names from their surroundings, village and rural environment. The children understood the concept of perimeter almost in the first attempt itself. There was a village called Ichhapur where this incident took place a few years ago. There was a big open space in Ichhapur. But as the number of people increased in the village, they started occupying that ground. They started using a large area for farming and granary. A few people of the village began to worry when they saw this. Their concern was that if people continued to encroach the open space then the children would not have any place left to play. So, they also thought of occupying a part of the open place to be used as a playground. Some of them liked the idea and they decided to go ahead with their plan the next day.

The whole village learnt about it and all of them liked the idea. The next day many villagers prepared themselves for this event and marched towards the ground. One carried lime to draw lines, another had spade, another took a sickle with her so that she could cut grass or weeds that were growing there. Another had the rope. . All of them reached the spot with necessary tools. People got ready to occupy a large portion of the ground. One of the villagers held one end of the rope, another caught hold of the other and started walking as far as he could. Someone put the lime on the rope to mark the lines. Thus the place for the playground was marked. A smile of delight lit up everyone's face because now they had a big and permanent place

for their children to play.

While returning home the villagers were discussing the idea of the playground. Meanwhile, some of the villagers started worrying that if the marked area is left alone then after a few days the lime marks will get erased and somebody else might occupy that space. If that happens then their plan will go kaput. Therefore the proposal was to go to the collector and demand for the safekeeping of the playground and to provide funds for the same. Everybody liked the proposal and agreed to meet the collector the next day.

As per their plan, people assembled in the courtyard and from there went to collector's office together. After a while the collector came. He asked them the purpose of their visit. People put forth their demand.

The collector asked – How big is the ground?

People said – Very big.

- What does very big mean? Is it as big as this room?

- No sir. Much bigger than this.

- Is it as big as this building?

- No sir. Bigger than this.

- Oh! Have you occupied the area till *Saphalpur*?

- No sir. Not such a big area.

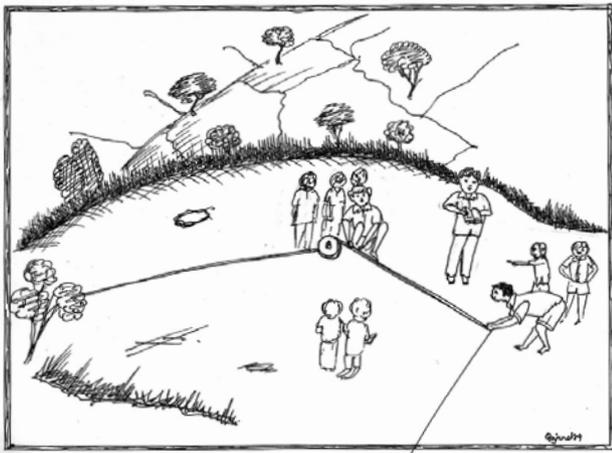
- Then why don't you tell me the exact measurement of the place? Give me its exact length and breadth.

Now the people were tongue-tied. They had not measured the length and breadth of the playground. Hence they did not have any answer to the collector's question. Now, they had no other option but to return to the village. The collector once again advised them to measure the ground properly and come back.

The villagers went to the ground again with the necessary stuff, such as a metre measuring tape and a pen and a notebook. The area that they had occupied was straight. How should they measure the ground? Everyone came up with their own

suggestions. One suggested that they could measure each line one by one. There were five lines on the ground. So they could measure them and then...

The immediate reaction to this was – yes, and then let us add up all of them. This way we will come to know the total length of the wall that has to be built. All of them understood the procedure and started measuring. The total measurement was 38 meters. Then they went to the other end which measured 23 meters, the next was 27 meter, 44 meters and the measurement of the last line was 49 meters. T was writing them in the notebook and U was adding them in her mind. As soon they finished measuring the lines the result was ready. Total length of the wall was 181 meter. The satisfaction of accomplishing the task was clearly seen on everybody's face. This was definitely an achievement for the villagers.



The next day all of them went to the collector again. This time they happily repeated their demand along with the measurement.

The collector asked – Do you want the enclosure to be made with thorny wire or do you want a

concrete wall? All of them shouted in unison that they wanted a concrete wall.

Collector – How tall do you want the wall to be?

- Three meters.

- Do you want to enclose the complete ground?

- Yes sir, complete 181 meters.

- Just think about it. You may want to leave some area...

- No sir, we have thought about it.

- If you construct a wall in total area of 181 meters, that too a three metre high wall then how will you enter the playground?

The villagers began to whisper among themselves – We never thought about this. What do we do now? Sir is right. We have to leave space for passage.

In the midst of the whispers the collector said – Please decide how much space do you want to leave. If you want you can go out and discuss.

They came out and discussed the matter. It was decided to leave four metres of space for the passage. They conveyed their decision to the collector. He appreciated this decision and happily allotted funds to construct a 177 meter wall. The villagers were delighted and their faces were beaming with happiness.

During the process of telling the above story, I was continuously drawing the shape of the playground on the green board and went on writing the measurements of the wall. The children not only understood the process but they also did mathematical calculations in their minds. The next day when I talked about the process and gave questions for practice, the children were calculating and answering.

Gajendra is currently a teacher at Azim Premji School, Dhamtari, Chhattisgarh. He has been teaching here for nearly six years now. Prior to this, he was a primary school teacher in a government school in Chhattisgarh, where he started his career and taught for twelve years. Some of his hobbies include writing stories and poems for children, listening to music, and painting. He may be contacted at gajendra.dewangan@azimpremjifoundation.org