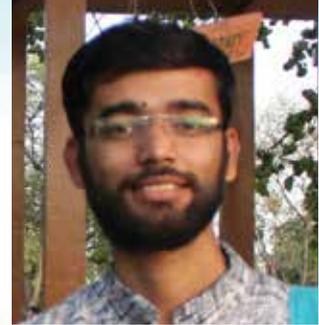


## TLM-An Obstacle or an Advantage?

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In the educational fraternity, we commonly use some terms such as pedagogy, learning practices, etc. The thing which is to be discussed as of now is a special word known as Teaching learning Materials or commonly known as TLMs. What does the word TLM? What is its utility? If I go by the definition of TLM, it means any aid that assists in teaching and learning of students may be categorised under this definition.

The common misconception is that TLMs must be made by teachers only and must be used by students in order to understand a concept. I too thought this - that because a teacher knows the topic well or he/she has an expertise, only he/she could create opportunities for the students to understand it much better. But very soon, I had to change my beliefs.

An incident made me do so.

In the Fellowship Framework, I had to go through a School Understanding Programme (SUP). In this, I had to continuously observe a specific school over a period of time. So during my observation period, I was observing a class 5 maths lesson. The teacher was talking about number line on which numbers are placed. There were some students who were not getting the point - they could not understand it. Though the teacher was explaining it again and again. After few more attempts, he just moved on.

The next day, there was a student who came with a straight wire having some loops that he had got from his father. He told the teacher that this wire resembled the number line, where the loops may be treated as numbers. The teacher was amazed to see it and used it in the class with a little improvisation. He just placed some number cards on the loops with help of cellotape. Now the students could clearly visualise the number line and do some basic operations like forward, backward, jumping etc. with the help of this TLM. So this incident clearly acted as a myth buster to me.

### TLM as a visualisation aid

Now this is from my time as a teacher. Teaching was also part of my fellowship framework. During my transaction period, I was transacting a particular theme -Time Measurement planned for class 5. I was discussing the ancient time measurement techniques. It included using sundial, water clock, sand clock etc. The students were able to get the concept, but it was very difficult for them to visualise the actual instruments.

To make it easier, I decided to develop one of them with help of the students. We decided that we would make model of sand clock. As the first step, we made a list of the materials required: two plastic bottles with caps, Fevistick and sand. The students volunteered to bring the materials.

The next day when I went to school, the students were very excited. They showed me the materials. The sand was not fine enough and had to be filtered. I asked a student for a sieve. While I was talking with some students, I observed that one of them just went outside, found a small bottle of very soft plastic. He took a bottle, made a hole with help of stick and then started filtering sand. Though the size of the holes made by stick were very big and filtered sand was not as fine as required, I was startled. The idea was brilliant - you never know the level of creativity in students.



After filtering the sand we just made a hole in the bottle cap and joined the cap of bottles with help of the Fevistick. The sand was flowing from the top bottle to the bottle below. Students were now able to understand/visualise the method of measuring time. One cannot imagine the joy and happy which they felt during and after making of sand clock.

### **TLM as a concept clearing tool**

We were once again dealing with the same topic in the same class, but this time it was the subtraction of time. Students were facing great difficulty when they had to subtract by 'borrowing' from minutes: for example, subtracting 3 hours 59 minutes from 5 hours 55 minutes. So, to deal with this I used popsicles. I asked them to make the bundles of 60. They were so thrilled that many of them made more than one bundle. Now getting to the problem: the bundles were placed in the hour column and some loose popsicles were placed in the minute column. When they had to 'borrow' from the hour column, they could clearly see that one bundle equals to 60 minutes and now they could solve the problems very easily.



Earlier, the students were not able to visualise that one hour equaled 60 minutes. Some solid demonstration, which they had done themselves, made the concept very easy to understand. Once they did it with the popsicles, they understood the concept behind that activity. Now they could easily do the subtraction without the help of the popsicles.

### **TLM as a learning assessment tool**

The next TLM which I am going to discuss may be used in much lower classes such as classes 1 and 2. This activity may be used for assessing whether a child has learned number recognition. .

Some beautiful coloured photos, which are present in the children's surroundings and which they

find attractive were printed and laminated. Then, the pictures were divided into ten parts with the numbers 1-10 written on each. The students had to arrange the numbers to complete the picture. With the help of this TLM, a child will feel like making some new thing. Also he/she will be curious to know what image would appear.



With this activity a child's learning can be assessed in a very attractive and interactive method instead of the usual paper pencil test. Actually what usually happens in classroom practice, is that the teacher comes, scribbles something on the blackboard and students shout in a chorus - 1,2,3.... without understanding the meaning.

During an interaction, a teacher once told me that earlier he used ignore TLMs and his pedagogical practice was also very ordinary. But after attending a workshop he realised that each and every thing he sees could be used for TLMs. He told me, 'Wherever I go, I see TLMs. During my morning walks, I collect smooth stones. In restaurants, I collect paper plates. In ice-cream parlours, I collect sticks. These things which I collect had helped me in my classroom transaction. Now I have realised that my pedagogical practices have improved'.

On the other hand, TLMs have limitations. The problem lies in using the TLM: when a teacher depends only on TLM it is just a medium of getting

the concept. But sometimes what I have observed is that teachers are very much governed by TLMs and they do not get into the concepts.. They must be used, but the underlying concept should also be discussed. They are the journey, not the

destination. Also, TLMs become more effective when the learners are involved in the process of creating them. Learners too may identify the limitations and advantages of TLMs. This is not solely the responsibility of the teacher.

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