

Focus on Foundational Learning is Important

Nandini Shetty

School not only enables children to learn various subjects, but it also lays the foundation for their social, emotional and cognitive development. Children learn better and more quickly when they are learning with other children. School keeps children away from family problems, child labour and social ills, such as drug addiction. Children have faced many family and social problems along with learning losses due to the closure of schools. Many children have forgotten how to read, write and solve numerical problems, which may act as a deterrent for them to return to school. Hence, it is extremely important to reopen schools soon and facilitate children's learning.

Sethu Bandha programme

In our government schools, worksheets were provided to children as part of the *Sethu Bandha* (literally, bridge) programme to ensure continuous learning during the closure of schools. An effort was made to teach concepts through these worksheets. The *Sethu Bandha* programme was carried out for a duration of 45 days for classes I-V. Children were asked to come to school with their parents to collect the worksheets. If children were unable to come to school, the worksheets were taken by the teachers to the community for distribution. There were many challenges in implementing this programme.

Worksheets

Worksheets can be used effectively for practising the concepts learnt and for assessment. However, it is rather difficult to use worksheets for concept formation. As parents carry their mobile phones with them to work, teachers were not able to contact all the children over the phone. Many teachers were also engaged in COVID-19-relief efforts and were not present in the school when children came to clarify their doubts and ask questions. Most of these worksheets were intended for practising grade-specific concepts. They were not related to concepts that were taught in the previous years. Since children were not able to read and write and they had forgotten what they had

learnt in the previous years, they were unable to read, understand and answer the questions in the worksheets. Children were returning either blank worksheets without answering or worksheets with answers copied from previously answered worksheets. Hence, it can be said that it was not possible to implement *Sethu Bandha* programme meaningfully.

Learning loss

School closure for the past one-and-a-half years has had varying effects on children's learning. In the schools that I am engaged with, I have observed that children who were quick learners have also forgotten what they had learnt in the previous classes and were struggling with foundational skills (reading, multiplication and division). Nevertheless, when we revisit these concepts, they are able to remember what was taught and are able to learn quickly.

On the other hand, children who were slow in learning, such as children who were learning in a graded manner (for example, in mathematics initially these children were provided with concrete objects for concept formation, then the concept was reinforced with the help of pictures and finally, they were given problems in abstract form, that is, in numbers), have suffered a significant loss in learning. Three children in class IV who were taught using this method, and who could earlier recognize and write two-digit numbers in ascending and descending order, recognize small and greater numbers, understand and knew the method of addition and subtraction (concepts that were class-appropriate), were found to have no understanding of quantity which they had learnt earlier. For example, they are not able to differentiate between smaller or greater numbers, nor able to tell which number should be added to 20 to get 30, nor able to understand and solve questions, such as $5+3=?$. Teaching these children class IV content would be ineffective as they will be unable to grasp anything. We need to start by teaching them concepts taught in class I all over again.

Similarly, children whose mother tongue is other than Kannada have had no exposure to Kannada during this time. They have forgotten Kannada letters and now need to be taught *aksharas*, *guniaksharas* and *ottaksharas* again. Therefore, we will not be able to make up for this learning loss in 30 to 45 days.

Focus on foundational learning

The *Sethu Bandha* programme has ended now, and schools have received textbooks for all grades which means class-level concepts will need to be transacted. The formation of these class-appropriate concepts depends on fundamental concepts in language and mathematics (reading, writing, number concepts, addition, subtraction, multiplication and division) and other basic conceptual knowledge. In essence, to ensure meaningful learning, we need to make sure that children have learnt foundational language and mathematical skills. These need to be taught before or along with level-appropriate concepts. While teaching science and social science lessons we should start with fundamental concepts as well. If we do not attempt to fill the learning gaps, children may lose interest in learning and may drop out of school.

Way forward

Assess competencies

Due to the reasons mentioned earlier, it is extremely important to understand the learning level of each child. We need to use simple, informal and meaningful methods for assessment. When children visit the school or when teachers go to the communities to meet children, assessment can be carried out in the form of conversations, by posing simple questions, by making children read simple words and sentences and by asking them to solve simple problems. Through these, each child's competency in basic language, mathematics and other subjects can be assessed. This would provide us with an understanding of the level one needs to begin teaching from for each child and help us in grouping children based on their learning needs.

Begin again

As long as schools remain closed, teachers will need to go to the communities that the children live in to teach them. We can start by forming small groups of two to three children. After teaching each concept we must give them simple worksheets to practice what they have learnt. Periodic informal assessment should be carried out to track each

child's progress. A portfolio must be maintained for each child, and the summary of these assessments included in it. Only after a child attains a clear understanding of a particular concept, should the next concept be introduced. Also, we cannot use just one single worksheet on a particular concept because even within a group, children will be at different levels of learning. Hence, for each concept, several worksheets need to be designed to cater to diverse learning needs. For example, if we need to teach the addition of four-digit numbers, we can follow these steps:

Stage 1: Begin with a one-digit number. Simple problems in the form of statements that the child can connect with everyday life should be given. This would make the child understand the concept of addition. If the child is not able to solve this, a few concrete objects should be given to teach addition. Following this, the child can be taught to represent the same using numbers. It is necessary to use concrete materials and a variety of activities for children who learn slowly. Once a child starts solving number problems with ease, worksheets should be given for further practice.

Stage 2: Next, problems with two-digit numbers (up to 20) should be given. As with one-digit number problems, children who struggle to solve the problems should be given concrete objects to work with. Once they start solving the problems, worksheets can be for practice.

Stage 3: Addition with carry-over to tens place using small two-digit numbers can be explained using bundles of tens. Many children struggle to understand the addition of numbers with carryover. Therefore, it is necessary to give opportunities to solve many problems using bundles of tens. The more they practice, the better the concept clarification. In future, this will help children learn the algorithm steps of addition of numbers with carryover.

Stage 4: After children learn to add using bundles of tens, they should be given problems with numbers to solve using algorithms. They should add using the correct steps. Worksheets should be given for practice.

Stage 5: Once children are familiar with the above concepts, addition problems using three- and four-digit numbers can be given. Number problems should be given after children practice with concrete objects. For each concept, relevant worksheets for practice at every level should be prepared.

Stage 6: A worksheet with addition problems using

one-to-four-digit numbers should be given at this stage. This will be the final assessment worksheet. New concepts can be introduced to children who are able to complete the final assessment worksheet correctly. For children who are unable to complete the worksheet, errors should be identified and required concepts need to be taught again. After this, the assessment should be repeated.

It is desirable to introduce each stage with problems in the form of statements related to real life. An assessment can also be conducted after every two stages, before the final assessment. The learning and assessment details of each and every stage should be documented and included as part of the child's portfolio.

Progress of all children needs to be checked periodically. We need to pay special attention to children who learn slowly, even if it means we have to put in some extra effort because only through this will a child be able to secure a better future. Children will remain in the education system if they learn well and if there is continuity of learning.

Prevent children from dropping out

Whenever school starts, our main task will be to bring the children back to school. Children might have been subjected to various kinds of physical, sexual and mental abuse during this time. Some may have lost their parents or others in the family. As we know, many children have started working due to financial distress at home. It will be very difficult to bring these children back to school. It is imperative to have conversations with parents and guardians to convince them to send children back to school. We need to have conversations with the children, too. Again, this may seem like a difficult task, but it is absolutely necessary to make an effort in this regard.

At present, children have lost the habit of attending school regularly. Children who were frequently absent earlier may not be interested in coming back to school. We need to meet these children and convince them to come back to school. The only way to prevent absenteeism is to understand children's mental state and the problems they are facing, and by treating them with love. When they do come back, they should be engaged in drawing, colouring and other activities that they are interested in, before engaging them in academic learning, especially for those who have lost interest in learning. Children who have lost interest in schooling may need some time to get used to learning activities. They may have lost the habit of sitting attentively in class and following lessons. Hence, lessons must be planned with a lot of activities and ample opportunities for observation, practical work and data collection which will take children out of their classrooms. This will ensure children's enthusiastic participation. We need to keep checking children's learning through informal assessment methods.

The COVID-19 pandemic has destabilised the life of many children. We have a responsibility to protect these children's future. Many children will completely drop out of the education system unless we take adequate measures to ensure that they can continue to learn. If we let children drop out, many families will face financial, social and familial difficulties in the future. This will further widen the inequity that is prevalent in society. Children have lost a critical one-and-a-half years of joyful school life due to school closure. Quality education is the right of all children. Under no circumstances should children be deprived of it, and it is our duty to ensure that their right to education is protected.

Endnotes

- i *Sethu Bandha* programme was implemented by the State Government in all government, Kannada-medium schools of Karnataka.



Nandini Shetty is a member of the Azim Premji Foundation and works with government schools in Bangalore city. She has a Ph D from the Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore. She can be contacted at nandini.shetty@azimpremjifoundation.org