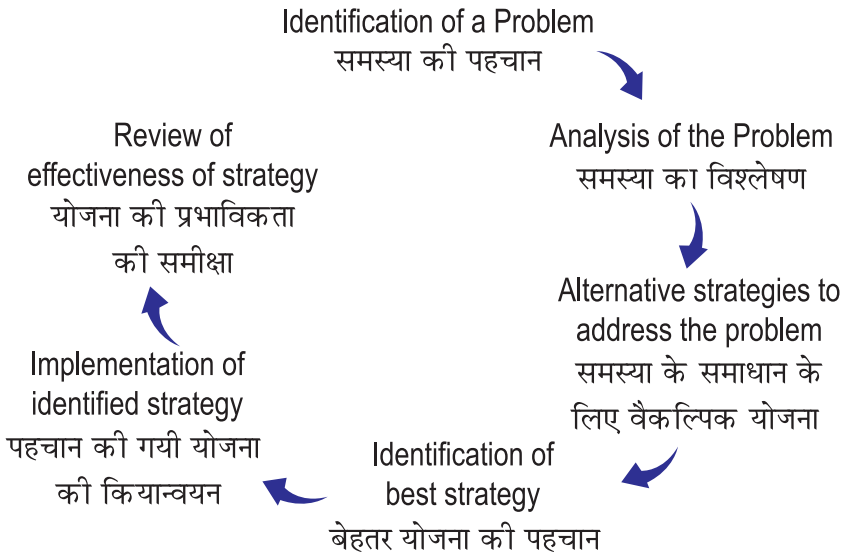
Action Research and Reflective Practice

Sneha Titus and Indumathi S

Pedagogy, like any other field has its 'pop' vocabulary and the flavour of 2013 was 'Action Research'. The set of videos which we reviewed were part of a project based on the work of teachers in a school in Dineshpur, Uttarakhand, India carried out between August and December 2013. Eight teachers and the Principal chose to conduct action research on problems that they faced in their classrooms – this process was facilitated by some members of Azim Premji Foundation. The study was led by Dr. Neeraja Raghavan and her work has been collated in her book 'The Reflective Teacher' in which the case studies used are those encapsulated in the video films titled 'Emergence of the Reflective Practitioner from within the In-service teacher'.

What a thought provoking title! The title- 'Emergence of the Reflective Practitioner from within the In-service teacher', brings to mind a chrysalis- the potential that each in-service teacher carries within himself or herself. And indeed, the short films that showcase the work of the teachers in the study are striking for this very reason. Here we see a group of teachers, struggling with problems that teachers all over the country face- students who have difficulties with basic concepts and lack skills of literacy and numeracy, first generation learners, irregular attendance and lack of support from the home environment…….the list is endless! Add to this, the teachers cope with pressures of 'covering' the syllabus, handling students who are at different levels in the class, students who don't speak the same language as the rest of the class……what can emerge from such scenarios?

Yet, incredibly, one sees teachers identifying problems and applying innovative, yet simple strategies to address them. That, in itself, is nothing unusual. World over, teachers do this day in and day out- as the teacher in the video says, there is no need to give the name 'Action Research' to what we do as a part of our work. What makes the difference is the cycle which the teachers in the project went through.



if not, the research team encouraged the teachers to initiate the AR cycle all over again.

Almost unanimously, the teachers decried the documentation that was an inevitable part of the process. But almost in the same breath, they agreed that it was the crucial factor that helped them to reflect on the strategies that they had adopted. Some of them seemed to seek a benchmark, the 'right' way to document. Yet in the end, they all seemed to realise that it was the reflection that was the key, not the documentation.

The following section describes the action research initiatives taken by the teachers.

a) Enhancing English vocabulary and reading abilities: Shipra Agarwal

Like many teachers, Shipra Agarwal had a firm hold on the textbook as her guide to her classroom interaction for most of the seventeen years that she taught school children. At some point, she began to move to a position where she wanted to make her students better at the subject she taught- she wanted them to learn the subject and she wanted them to learn how to learn the subject! As part of the action research project, she decided to increase the English vocabulary of children of class 4 so that they recognized words and understood their meaning. Preliminary assessments that she undertook after teaching a couple of chapters indicated that children had problems in speaking, reading and writing English. Of these, she focused on reading and, interestingly, on building the child's confidence. She used innovative strategies such as visual clues, peer support and language based games. By slowly withdrawing supportive scaffolding, she was able to make the children more confident and independent in their reading skills with the total number of words read increasing almost 6 times after the month long intervention.

As I watched the video, I was impressed by the fact that Shipra's observation skills were sharpened by the imperatives of the action research program. It is clearly apparent that she detected gaps in the students' content knowledge as well as in skills. The strategies she adopted were simple and doable and most importantly, they targeted the heart of the problem- any teacher should be inspired to come up with such innovations. Teachers can also be heartened to hear that while her work did increase, she was able to cope with differentiated instruction in the classroom for students at different levels. In addition, she documented her learning in a practical manner that enabled her to reflect and learn without increasing her workload unduly.

b) Every child does observe: Mohit Sharma

Mohit Sharma teaches EVS and identified that a few students in his class could not read and write in Hindi. He wanted to build their confidence so that they take interest in learning EVS.

He evolved strategies that involved observation and presenting their learning and understanding through diagrams/ pictures. He made students draw animals and match them with the habitat through images. He adopted few such activities that helped students draw and present their ideas. He did these activities with all the students but documented and observed these 5 students and their learning.

Mohit found that these children also learnt as like other students but had problems in only writing the answer. Diagrams and images worked well for them. He could observe that these students also started speaking and participating in the class activities. They were observant and in another activity on breathing by fishes, one of these five students made an important observation and shared the same in the class.

Mohit understood that making students read and write alone and testing their written skills might not give a good picture of students' learning and that they should be given chances to express themselves in different ways. He also seemed to have built trust and relationship with these kids and in-turn their confidence level has increased. Also Mohit's idea of not separating them from the class and involving the whole class indicates his understanding about children. Mohit also reflects on his practice of assessment of students.

c) Ensuring understanding of Place Value up to 3-digit numbers- Shakuntala Chaurasia and Saud Ahmed Khan

Here is an absolutely honest account of both the struggles of a mathematics teacher as well as of the amount of work teachers have on their plate. Shakuntala Chaurasia and Saud Ahmed Khan decided to do the project together and they address a common problem faced by primary and elementary school teachers. How do they proceed with the volume of content to be taught in class 6 when students do not even know the fundamentals of the subject? In this case, students were struggling with place value in class 6. Using a simple set of problems on the blackboard and thus ensuring that students were not stressed with a 'test', they

identified nine students who had difficulties with ordering, comparing and writing two and three digit numbers. They decided to use material which was easily made by the students in the class- coloured blocks of units, tens and hundreds to teach the concepts. By starting from the basics, they were able to help the children with their numeracy skills.

I enjoyed this video for several reasons – the honesty in facing the true state of the students' understanding, the feeling that remedial strategies had been applied previously and would continue to be applied even after the project was over, the open admission that the documentation was tedious and cut into the teachers' time at home. In spite of all this, the discoveries that the teachers made: the students' attachment to the TLMs that they had made, the student who was lagging behind clamouring for home work, the strategy of getting students to create their own problems, the convenience of having two teachers to handle the stress of differentiated instruction and share the demands of the project all this is more convincing and related to a teacher's stresses, giving her reason to try and take the scenic route through understanding rather than the shortcut of delivering content.

d) Children learn by doing themselves: Neeraj

Neeraj teaches Science in class V and VI. He found that students don't ask questions and tend to believe what the teacher says. He felt the need to introduce students to the process of science and help them inquire.

He initiated discussion with students and helped them raise questions as a first step. He involved them to find out the factors that affect germination and whether plants absorb water through roots. They set the experiment, made observations and recorded the same. Students asked lot of questions and also altered the conditions- sunlight, availability of water and soil to find out about germination.

Through this process, the children have started asking questions and as well tried to find answers on their own. Neeraj earlier used to teach the principle and then do the activity, but now he is helping students engage in an inquiry and find the principle by themselves. He has also stopped giving answers to them directly. This process has helped him to reflect and understand that children learn by themselves and learn by doing. While carrying out with this action research he has also learnt from students and made him think about various science phenomenon.

e) Enhancing competency in reading and writing the Hindi alphabet and words: Narendra Joshi and Sahabuddin Ansari

Paul Lockhart in his famous piece Lockhart's Lament says of the teaching of mathematics: 'And I haven't even mentioned the lack of mathematical criticism in school. At no time are students let in on the secret that mathematics, like any literature, is created by human beings for their own amusement; that works of mathematics are subject to critical appraisal; that one can have and develop mathematical taste.' While the state of language teaching is in no way as ruthlessly chopped as that of mathematics, the Whole Language Approach which Narendra Joshi and Sahabuddin Ansari adopted as the strategy for their Action Research Project to teach reading skills in Hindi, certainly helped the students to develop a taste for the language. In this video, we see the teachers relating the study of language to the real-life experiences of the student and helping them to 'experience' the language they were learning to read by presenting them with words rather than alphabets. These teachers faced a common problem: teaching the Hindi script to students who did not speak Hindi at home. They therefore worked with stories – writing a short, interesting narrative on chart paper and pinning it to the wall some days before the lesson, then reading it out to the students with gestures and actions, giving each student a copy of the story to read on their own, asking students to arrange the sentence strips from the story in a sequence and so on. In addition, they engaged in role play, games and other learning activities. In about 3 months, most of the students showed marked improvement in their reading ability.

This clip is not as tightly edited as the others and the teachers do tend to ramble a bit but in these conversations, one gets a sense of the efforts made by the teachers in the face of stumbling blocks- irregular attendance by the students, lack of support from the home environment, the need to catch up with the level of the class and so on. It was very apparent that the teachers drew heavily from the training programs that they had attended to conceptualise, understand and build on the strategies they adopted. This, in itself, is encouraging. Many teachers attend training programmes- how often do they get a take-away

which they implement in class? Not just this, a teacher watching this understands and identifies with the sense of evolving strategies from the slow, and often regressive, pace of the students. These videos are real and that, more than success stories, are what a teacher needs. The feeling expressed by the teacher that though the project ended, the work didn't will certainly strike an empathetic chord as will the need for a peer group which supports the teacher with ideas and innovative strategies.

f) Blending two approaches to teach language effectively: Madan Mohan Joshi

Madan Mohan was teaching EVS and took to teaching Hindi in class IV which is commendable. He found that few students (5) in his class IV could not read and write and even identify words in Hindi because of which they could not enjoy a poem or a story.

He tried to blend whole language and traditional approach to teach these kids. He introduced a story, made them read a word and then moved to letters. He challenged them by making them read a story in the reverse manner to test if they could really word.

More examples of strategies used by the teacher to blend traditional and whole-language approach could have been given. It is not very clear in this video. The claim made by the teacher that these five students could read almost all the words in few months is also questionable. He also claims that they could enjoy poems and stories as they could read. Madan made these five students work in a separate group and he was finding it difficult to manage two groups in the same class. Some background details of this teacher and his reflection of teaching EVS and moving to teach Hindi and how he found it would also have been helpful. This video could have been edited tightly and better structured. The teacher's efforts in documenting is very clear here.

Action research and reflective practice

Teaching is a reflective practice, the teachers constantly evaluates his/her plans and evolve strategies or change the course of action to improve their practice. Reflecting on an experience and evolving a plan of action to improve the practice of teaching is recognised as 'reflective teacher model' (McMahon, 1999). Teachers involved in action research in this project also agree that their nature of work involves reflection and action.

As one watches these videos it is clear that this process of action research has helped these teachers think of their classrooms, their teaching-learning process, how children learn, strategies that might help children learn better, problems that learners face and so on. It has helped them reflect on their own assumptions. These teachers have helped students engage in learning. There is smile in their faces and joy of doing something effective as they have been able to see some changes in children's learning. This has also helped them to collaborate with other teachers, head of the school and discuss their problems and strategies. The documentation though tedious has helped them reflect and understand their journey.

These videos and the narratives also now serve as a useful resource for teachers and teacher educators as such examples in Indian context are close to nil. These can be used in workshops to understand the process of action research and can also serve as good self-learning materials. These examples might motivate other teachers to reflect and try out such strategies in their classroom.

For copies of the films, you may write to Shinto Mathew at shinto.mathew@azimpremjifoundation.org

References

Tim McMahon (1999), Is reflective practice synonymous with action research? Educational Action Research, 7:1, 163-169, DOI: 10.1080/09650799900200080

Sneha works as Assistant Professor in the School of Continuing Education, Azim Premji University. Sharing the beauty, logic and relevance of mathematics is her passion. She is the Associate Editor of the high school math resource 'At Right Angles' and she also mentors mathematics teachers from rural and city schools. Sneha conducts workshops in which she focusses on skill development through problem solving as well as pedagogical strategies used in teaching mathematics. She may be contacted at sneha.titus@azimpremjifoundation.org

Indumathi is with School of Continuing Education, Azim Premji University. Her interest and passion lies in science education, women and science and teacher professional development. She is pursuing her Ph.D. in education and working to understand the experiences of girls in science classrooms. She may be contacted at s.indumathi@azimpremjifoundation.org