ASSESSMENT - NOTES FROM THE FIELD

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Every educational intervention expects to lead to improvement in the learning outcomes of students. Many interventions in India focus on building teacher capacity, creating a learning-conducive atmosphere or bridging the gap between the school and community which are then expected to positively impact learning outcome of students. Assessment is a significant part of an intervention to systematically understand improvement in the learning outcomes of the students, and helps teachers or facilitators to understand problems that students face and design processes for improvement. It also helps teachers and functionaries to understand preparation for teaching better. Azim Premji Foundation has had experience of conceiving and administering assessment tools and processes in schools to evaluate the impact of our interventions and to promote learning.

Learning Guarantee Programme:

The Learning Guarantee Programme (LGP) was a joint initiative of the government of Karnataka and Azim Premji Foundation. Between 2002 and 2005, it ran in seven districts of North Karnataka which have 9270 lower and higher primary schools. Of these, 1887 schools volunteered to participate in the three years of the pilot. The objective of the programme was to promote reform in the examination system - i.e. a shift from traditional rote evaluation to competency/ skill and understanding-based assessment. The criteria for assessment were enrolment, attendance and learning achievements of children in the primary grades. Schools that met performance levels in all of these three criteria were recognized as Learning Guarantee Schools (winners). In the year 2003, of the 896 schools, 40 schools were declared 'winners' (Learning Guarantee Schools); in 2004, the second year of the pilot, 84 out of the 1443 schools that were assessed qualified as winners and in 2005, the last year of the pilot, 144 out of the 1887 schools that were assessed were declared 'winners'.

The key elements of the programme were: voluntary participation of the school and every child being assessed using tools and processes based on understanding, skill and application. Feedback on expected competencies was given for every child. Also, assessment took place on a mass scale in a campaign mode where more than 1000 trained volunteers worked simultaneously across the North East Karnataka.

A four-member team from the Foundation conducted the assessment with both written and oral tests in Language and Mathematics from class 1 to class 4. Feedback was given with the assumption that teachers would work with the children to improve learning competencies and emphasize understanding and application. It was assumed that teachers will work with students based on the feedback provided.

But, interestingly, this did not happen. On enquiry, it was found that the teachers found the detailed feedback useful but did not know how to go about using it and wanted training to incorporate skill and understanding-based teaching. We had expected teachers to create an intervention model without training.

Insights from the programme:

- This was the first time in the history of Karnataka where data from 1800 schools about the learning outcomes of each child in classes 1 to 4 was made available.
- We were able to assess all 1800 schools across seven districts within three months with the help of more than 1000 volunteers.
- Teachers wanted help with designing understanding-based classroom processes for students. This was not part of the programme.
- It is difficult to reform the examination system unless it accepts and incorporates the understanding-based tests. We were only able to motivate the government to conduct similar assessments across the state. We were unable to promote school level assessments based on understanding/skill.
- Our effort of three years has given us a perspective on understanding-based assessment but has not influenced classroom processes.
- We were not able to develop the context-based assessment tool because both the numbers and the area were too large to standardize.
- Shifting from memory-based tests to understanding-based test needs lots of background work, perspective building and training.
- Maintaining transparency and accuracy is a major challenge in a mass-scale assessment.
- When the stakes are high, the chances of inconsistencies increase.
- From assessment to execution, the change is a major leap, which is difficult when many parties are involved and there are many variables.

Assessment of 'Higher- Order Thinking' at Bellary, Karnataka

This was a small intervention and experimental study jointly organized by Azim Premji Foundation and DIET Bellary on Higher Order Thinking (HOTS) and was aimed at progressing from assessing rote learning to testing critical and creative abilities in children, with a part of the study consisting of assessing teacher's subject knowledge and attitude.

Higher-order thinking requires students to manipulate information and ideas in ways that transform their meaning and implications. This transformation occurs when students combine facts and ideas in order to synthesise, generalise, explain, hypothesise or arrive at some conclusion or interpretation and allows students to solve problems and discover new (for them) meanings and understandings. When students engage in the construction of knowledge, an element of uncertainty is introduced into the instructional process and makes instructional outcomes not always predictable. Another objective of the project was to see the connection between learning outcomes of the students, content knowledge and perspective of the students.

The Foundation team spent two days in each school to conduct assessment on higher order skills in language and mathematics for classes 3 and 4. Teachers were also assessed for their understanding of content and pedagogy along with areas related to attitudes. An analysis of this study reveals students performed well on higher order skills when they were able to relate to their context and share their experiences. The performance of rural students was slightly better than urban (small town) students on higher order skills. There was no significant difference of learning outcome of the students between schools that had participated in the Learning Guarantee Programme and those that had not while the knowledge of the teachers across both categories were the same. Here are some correlations between teachers' attitudes and student performance:

- Teachers tended to think that a student should not ask lot of questions, that experienced teachers need not share their learning, that they (teachers) were unable to deal with disciplinary issues.
- Teachers also seem to hold on to traditional teaching practices and have a 'stereotypical' idea of children and the way they learn.
- Teachers in both categories of schools (those that were part of the Learning Guarantee Programme and those that were not) did not demonstrate a positive understanding or belief in equity.

The study brought out the interesting insight that there is a close connect between the learning outcome of students and teachers' attitudes towards their profession, the teaching learning process, the community, children and equity. It was not really the knowledge of teachers which contributed significantly towards leaning outcome of students. The study also revealed that even in schools that had 'won' during the Learning Guarantee Programme, issues of 'teacher attitude' remain.

Child Friendly School Initiative (CFSI), Shorapur

This is an experiment to demonstrate a process of providing quality education to all children in identified schools in partnership with all stakeholders, while building capacity and accountability on a sustained basis. This intervention is being implemented in all 350 schools of Shorapur block in Yadgir district (Karnataka) since 2005. This is a holistic programme in terms of involving all relevant stakeholders (teachers, community members, students and educational functionaries) and covering a wide range of domains (school environment, classroom environment, teaching learning process, teachers professional development and community participation). A set of 214 indicators were identified for regular monitoring across the five areas mentioned above. The CFSI intervention comprises different kind of assessments like baseline, midline and end-line test of student learning outcomes, baseline and midline of school improvement plans, assessment of classroom interventions, assessment to see the connection between student learning outcomes and school improvement indicators.

It assumed that improvement in the school improvement indicators will in turn result in the improvement of learning levels of the students. Baseline school improvement plan indicators and learning levels of students of classes 1 to 4 were conducted in 2005. In the first three years (2005 2008) focus and efforts were on making schools achieve school improvement plan indicators. In order to see improvement and connection between the indicators and learning outcome of the students, a midline assessment was conducted in 2008 and analysis showed some unexpected results. Although there was 23% improvement in school development, learning levels of students did not show improvement. This was true even if the school showed a 90% rise in performance on school development indicators.

This mid- line assessment led to a review, in which the team felt that the indicators needed to be revised. We needed to incorporate indicators which could contribute to school development and concrete interventions in the area of teacher capacity building and community linkages. This resulted in exploring a lot of new interventions like teacher learning centres for professional development, 'change agents' training and regular teacher interaction meetings and bringing out a newsletter. Learning 'melas' for children, community 'jathas,' focus group discussions were also introduced as part of community participation.

In order to assess the impact of the programme so far, the Foundation carried out a midline assessment of learning outcomes among students

in classes 3 and 4 in some sample schools in March 2011.

The baseline and end line assessments were conducted on the following lines:

- The sample comprised 50 schools selected at random.
- All students of classes 3 and 4 in the sample schools were assessed using written learning achievement tests in Mathematics and Environment Science (EVS). Both the tests were administered in Kannada.
- Identical test instruments were used for both studies.

Analysis of the end line assessment shows a sharp and statistically significant improvement of 16.2 percentage points (more than 47% improvement) in the learning achievement levels between the baseline and the midline assessment (from 2009 to 2011). If we analyse data of the subjects separately, we find a similar increase across both Mathematics and EVS. However, interestingly, the improvement is much higher in class 3 (23.5 percentage points) than in class 4 (7.3 percentage points).The data when analysed by sex and socio-economic categories shows that there has been a significant improvement between the baseline and midline assessments, within all the categories.

The continuous and comprehensive assessment strategy of the Child Friendly School Initiative programme helped in providing useful data for course correction. Moreover it gave the team the direction needed to improve the programme and helped the team to see and articulate the impact made in meaningful ways. Importantly, it also built the team's confidence to speak to the external world with concrete data about the programme and the major learnings from it.

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