Exploring learning outcomes in multi-grade and monograde classrooms in India

Blog

Citizen-led assessments

Rural education

Multi-grade classrooms ? where two or more grades sit together and are taught by a single teacher at a given time ? were seen as an important means to achieving access to education for all. These classrooms exist either as a necessity due to factors such as teacher shortages, absenteeism, and low enrolment, or as a pedagogical reform in cases like the Escuela Nueva in Colombia.

Past studies have shown that multi-grade classrooms are challenging and require appropriate teacher training, as well as the right teaching and learning materials to function properly. Although limited, there is evidence that they can negatively affect students’ learning achievements if implemented inappropriately. In the current context of the Sustainable Development Goal on education (SDG 4), where quality of education holds precedence, there is a growing need to be able to measure learning outcomes in relation to classroom pedagogy and student grouping.

Against this backdrop, a 2018 study conducted under the People’s Action for Learning (PAL) Network Research Fellowship Programme, explores the learning disparities among children in multi-grade and monograde classrooms in India.

Why is this study unique?

The study, which was presented at the recent PAL Network Conference in Kathmandu, Nepal used data from the 2016 Annual Status of Education Report (ASER) in India, a household-based Citizen-led Assessment. ASER assesses children aged 5 to 16 years old on foundational reading and numeracy skills, including those enrolled in school and those out-of-school. ASER also records information on household assets, including ownership of motorised vehicle/s, televisions, and telephones, parental education, private tuition, and other variables that have been found to have an impact on a child’s learning outcomes. These assessments are conducted on a national scale, and cover all rural districts of the country.

This study therefore, goes beyond previous studies using household survey data, and takes into account the potential effects of contextual factors such as household economic status, child
demographic characteristics, and school characteristics like, pupil teacher ratio, school infrastructure etc. on learning outcomes. It explores (i) the incidence of multi-grade classrooms in rural India and (ii) the learning disparity among students in the different multi-grade and monograde classrooms. The study sample comprises over 10,000 students each from grades 2 and 4, in close to 7,000 government schools.

Multi-grade classrooms in rural India

In India, multi-grade classrooms exist both as a choice in the form of Activity Based Learning (ABL) Models\(^1\) or as a necessity, owing to policy mandates\(^2\) and/or high teacher absenteeism\(^3\).

The ABL model, certified by the United Nations as a pedagogical innovation, was adopted at scale in several Indian states, mostly in primary grades. It originated in rural Andhra Pradesh to overcome challenges of slow or no learning, high dropout rates and the high prevalence of multi-grade classrooms\(^4\).

What do monograde classrooms mean in states with the ABL model?

Evaluations of ABL models of different states have depicted improvement in learning outcomes. However, the sustainability of this model is heavily dependent on teacher availability, support personnel, and learning materials. Where these were inadequate, the model had no significant impact.

According to the 2016 ASER survey, grade 2 students in 62% of schools and grade 4 students in 56% of schools were seated with another grade in rural India. Breaking down the estimates further by states that implemented the ABL model state-wide (here on referred to as ABL states) and those that did not adopt the model at all (here on referred as Non-ABL states), grade 2 and 4 students in over 60% schools in ABL states were in a multi-grade set-up. In Non-ABL states, this was true for over 50% schools. It is important to note here that multi-grade is an inherent characteristic of the ABL model, therefore the presence of monograde classrooms (in about 40% schools) in ABL states raises concerns over the implementation of the model itself.

Has the ABL model been effective in enhancing student learning?

Foundational reading skills are generally low among students of grades 2 and 4 in India. This study found on average less than 20% grade 2 students could read a grade 1 level text, while less than 40% grade 4 students could read a grade 2 level text. Within non-ABL states, learning outcomes in necessity-based multi-grade classrooms are similar to that in monograde classrooms. While, in general learning outcomes are slightly better in ABL states, within them there is no significant difference between learning outcomes of monograde and multi-grade classrooms. This in turn, raises concerns over the effectiveness of the ABL model in enhancing learning outcomes.

Food for thought

Multi-grade classrooms seem to be an inevitable reality, especially in regions that are sparsely populated. However, in the case where curriculums both for students and for teacher training are designed for monograde classrooms, any form of pedagogy may be ineffective. Further, given that studies have shown that multi-grade classrooms are cost-effective, are an important means to make education accessible to all, and can improve both social skills and learning outcomes, there is an
urgent need to acknowledge these benefits and adopt ways in which curriculum and teacher training can be formulated to reap the best out of such classrooms.

1. Adopted by several states from the Multi-Grade Multi-Level (MGML) programme of the Rishi Valley for Educational Resources (RIVER) in Andhra Pradesh.
2. The Right to Education (RTE) Act, 2009 mandates one teacher per 30 students in a primary school and one classroom per teacher. In this regard, small schools with 60 students or less spread across multiple grades will have two teachers with two classrooms, making multi-grade classrooms inevitable.
3. ASER 2016 found teacher absenteeism rates in rural government schools in India were as high as 15%.
4. In India, student curriculum and teacher training predominantly cater to mono-grade classrooms. If the classroom is multi-graded, only one grade is taught while the other grade is left unattended with no teaching –learning taking place.