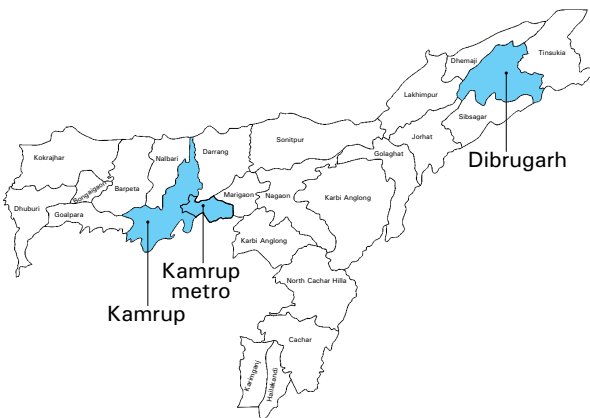


## The India Early Childhood Education Impact Study

The IECEI Study is a large scale, in-depth examination of the nature of young children’s participation in preschool facilities in India, and the impact of this participation on their school readiness and early grade learning. Conducted in three major states (Assam, Rajasthan and Telangana), this longitudinal study tracked a total of about 14,000 children for four years, from age 4 to age 8. This fact sheet summarizes major findings from the IECEI Study from the Assam sample.

### Study districts and sample



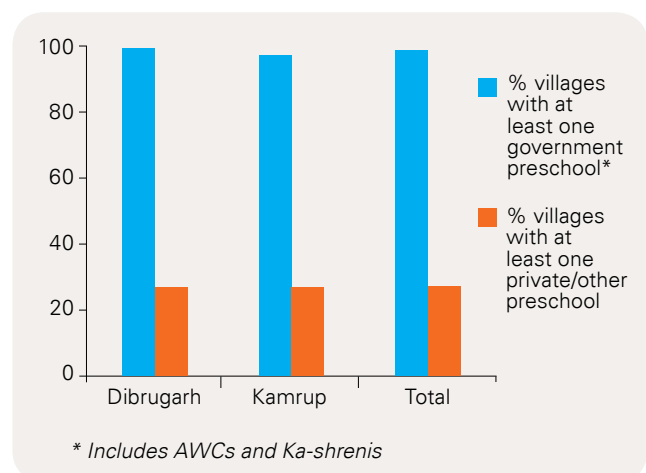
In Assam, the study was conducted in Dibrugarh and Kamrup districts, where 101 villages were randomly sampled for the larger survey-based strand of the study and 29 villages were covered as part of the quasi-experimental strand of the study.

A total of 3,510 and 1,013 four-year-olds were randomly sampled from the ICDS survey records in these villages as part of the larger survey-based strand and quasi-experimental strand. These children were tracked for four years.

### Are preschool facilities available for children?

**Assam is very well provisioned in terms of government preschool facilities.**

- During the baseline field visit for this study, a total of 616 preschools were listed in 115 sampled villages.
- Overall, 6 out of 10 sampled villages had 4 or more preschool facilities available. In Dibrugarh, all sampled villages, and in Kamrup, 98% villages had at least one government Anganwadi Centre (AWC or Ka-shreni<sup>1</sup>). Overall, less than one third of the villages in these districts had private preschools.



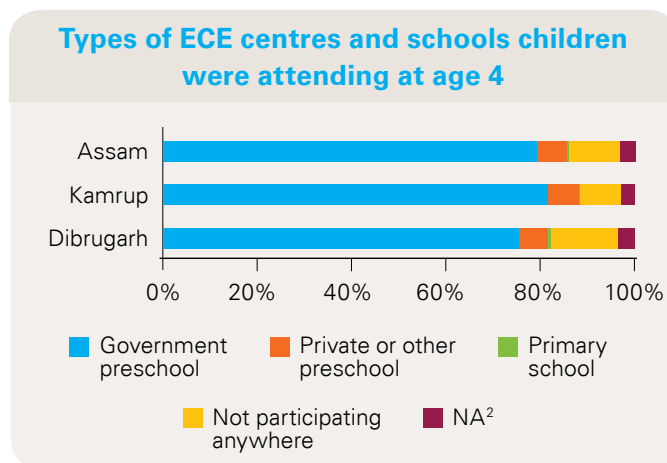
<sup>1</sup> Ka-shreni is an initiative of the Department of Education under its flagship programme, Sarva Shiksha Abhiyan (SSA). In the Ka-shreni model, which is unique to Assam, a pre-primary class for four- to five-year-olds is attached to some government primary schools as a preparatory class for children, prior to Grade 1.

## Where are children at age 4?

According to the National Early Childhood Care and Education Policy (2013), four-year-old children should be enrolled in preschools. They should enter Grade 1 only at age 6.

About 80% of sampled children in Assam were in preschool at age 4. The vast majority attended government preschool facilities – either AWCs or Ka-shrenis.

- Just 1 in every 10 sampled children were not participating anywhere. This figure was higher in Dibrugarh and lower in Kamrup.
- Unlike in Telangana and Rajasthan, almost no four-year-old children in Assam were found to be attending primary schools.



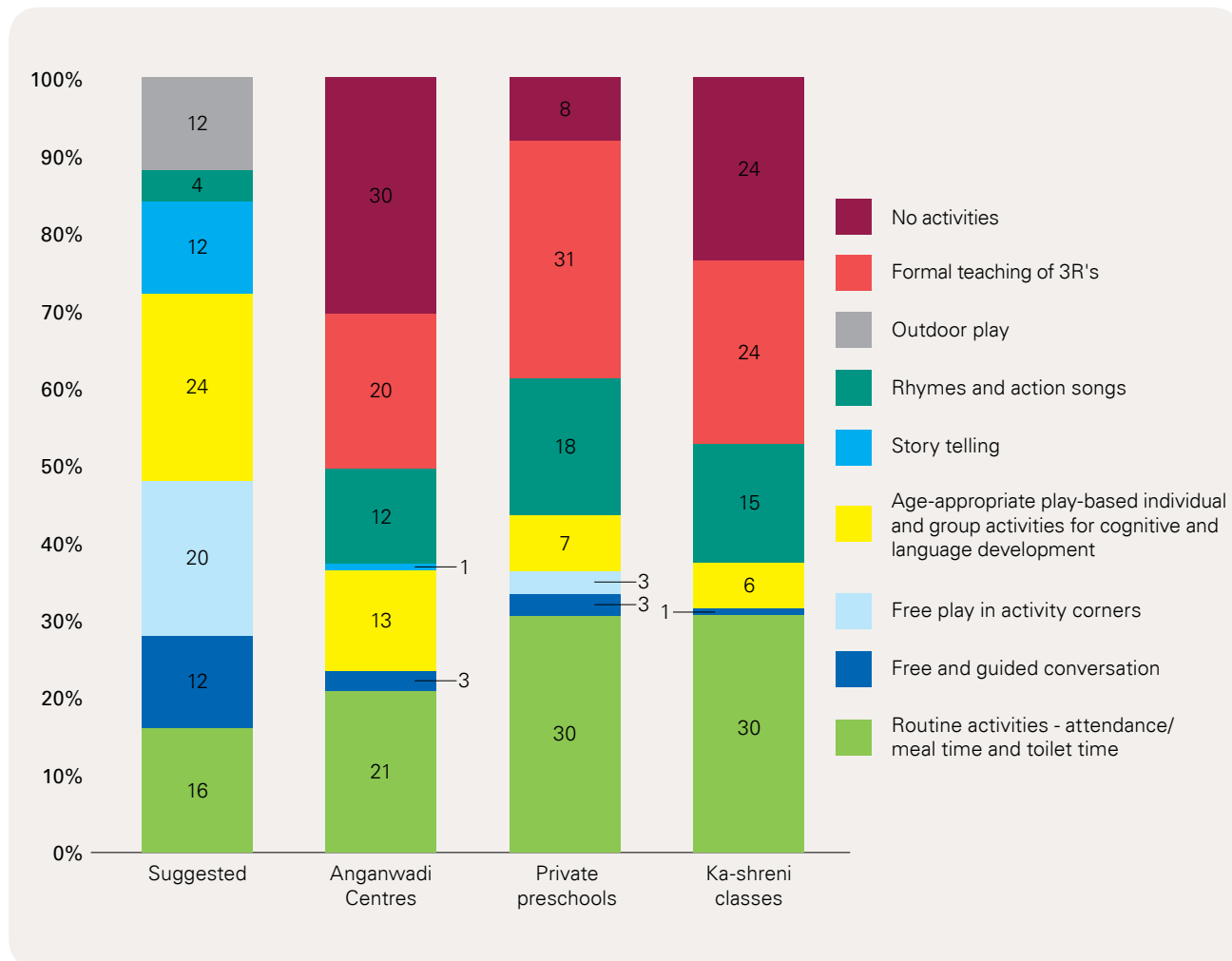
## What is the quality of preschool programmes attended by children?

In the quasi-experimental strand of this study, the quality of preschool programmes that sampled children attended were assessed on specific dimensions. A total of 117 preschool programmes were assessed in the two districts (75 in Dibrugarh and 42 in Kamrup) using an observation-based rating scale, called the Early Childhood Education Quality Assessment Scale. Three distinct models were observed - Anganwadi Centres, private preschools and Ka-shreni classes. Ka-shreni was identified as an innovative practice for the study. The three models are presented below within a comparative framework.

Anganwadi Centres (N=101)	Ka-shrenis (N=6)	Private preschools (N=10)
Limited infrastructure and learning aids in classrooms	Better infrastructure and availability of activity books for children	Good infrastructure but limited learning aids in the classroom
Heterogenous group of children 2-6 years of age	Heterogeneous group of children due to multi-grade classrooms	Homogeneous group of children
Mostly preferable pupil-teacher ratio	No assigned teacher	Higher pupil-teacher ratio
No schedule followed	No schedule followed	Subject-wise timetable is followed
Formal teaching, with some songs, rhymes and age-appropriate activities and materials; better social interaction	Formal teaching, with some songs, rhymes as in AWCs with some age-appropriate activities using activity books	Formal teaching with rote memorization primarily and a few age-appropriate activities
Anganwadi workers provided with minimal on-the-job training	No designated teacher – primary school teachers or Anganwadi workers fill in as teachers	Teachers untrained in ECE

<sup>2</sup> In the first wave of fieldwork, information on the type of the institution could not be documented for a small proportion of children. Such institutions have therefore been categorized as 'NA' for this round.

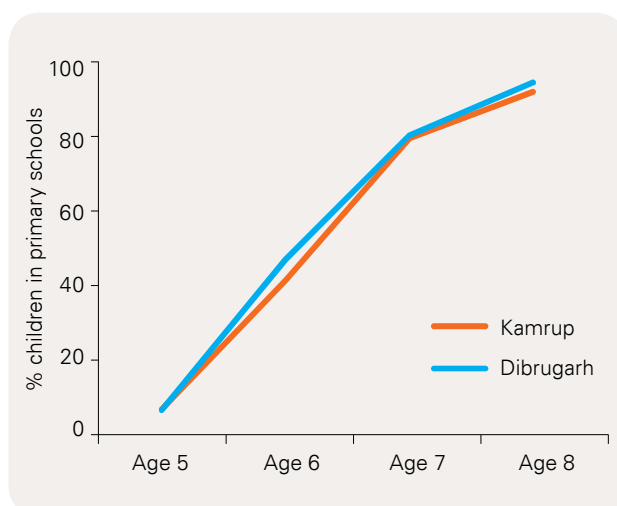
A time on task analysis carried out of a day's schedule (figure below) shows that the three models of preschool programmes were, on the whole, not age and developmentally appropriate. Children's experiences were observed to be largely limited to formal reading and writing activities, which are a downward extension of the primary school curriculum. For considerable periods, children were not engaged in any activities, particularly in Anganwadi Centres, and only a very small proportion of time was spent on play-based activities for cognitive, language and social skills.



## When do children join primary school?

Children in both sampled districts in Assam stay in preschool for longer than in Telangana or Rajasthan. It is only by age 8 that more than 90% children in both districts are in primary schools.

- At age 6, less than half of all sampled children were in primary school; by age 7 about 81% children were in primary grades.
- Participation in private primary schools is low relative to other states, although it increases as children grow older. At age 5, about 17% of sampled children in each district attended private schools. By age 8, this proportion was 36% in Dibrugarh and 28% in Kamrup.



Overall trends across the three study states show that for large numbers of children, the pathway to stable participation in primary school is not linear and includes back-and-forth movements between preschool and primary school. That is, large numbers of children were observed to move from preschool to primary school, back to preschool and then again to primary school. These non-linear trajectories were observed more frequently in districts where participation in private schools was higher. In Assam, however, at age 5 the proportion of children who had experienced this kind of non-linear movement at least once within the past year was much lower than those in both Rajasthan and Telangana.

## Does participation in preschool between age 4 and age 5 improve children’s school readiness and early grade learning?

As part of the IECEI Study children’s school readiness was tested at age 4 and age 5, and their early grade learning was assessed at age 6, 7 and 8.

The study finds that regular participation in preschool from ages 4 to 5 years has a significant impact on children’s school readiness levels at age 5+, with the quality of preschool education emerging as an important factor in enhancing school readiness levels. School readiness at age 5+ is in turn associated significantly with learning outcomes in early primary grades. In other words, children with higher school readiness scores at age 5+ continued to do better in each subsequent assessment round,

relative to their peers with lower school readiness levels. Overall in Assam, however, children’s school readiness at age 5 was below expected levels.

These data indicate the importance of investing in high quality and age appropriate preschool education as an important mechanism to help disadvantaged children catch up with their more advantaged peers.

Additionally, other than preschool participation, mother’s education and home language – whether it is the state language – emerged as significant factors which influence children’s school readiness levels in Assam.

