Only 1 in 4 children have access to digital learning in India

Students from low-income backgrounds have been largely excluded from the gains made in digital learning in India.

This growing digital divide*, especially at home, is a result of -

- Lack of awareness about EdTech products
- Limited access to devices and internet
- Limited evidence for EdTech effectiveness
- Lack of an enabling environment and guided support at home

While government and private players are addressing the accessibility issue by subsidizing hardware and internet, and defining guidelines, ‘at-scale’ efforts to make Edtech affordable and effective for Bharat’s students are limited.

Bharat EdTech Initiative aims to enable effective and equitable access to EdTech for children from low-income communities and improve student learning outcomes.

1. Provide access to high quality relevant EdTech* solutions
2. Enable EdTech adoption through localized support
3. Demonstrate improvement in student learning outcomes

One of the largest EdTech collaboratives in India, Bharat EdTech Initiative enables access to high quality EdTech platforms and drives last mile adoption to bridge the digital divide, improve learning outcomes, and generate quality evidence on EdTech.

Leveraging an ecosystem approach, Bharat EdTech Initiative aims to unlock the potential of EdTech for Bharat’s students and influence ecosystem practices.

96,000 Students
10 States
100+ Districts

*Source in Reference section
* Refer to the Glossary
To address the many barriers to EdTech adoption, Bharat EdTech Initiative brings together key stakeholders, with complementing capabilities, and co-creates contextualised learning models to support students in their learning journeys.

In year 1, Bharat EdTech Initiative has driven fast paced solutions on the ground, that keep the student and their learning needs at the centre.

### Steering Group

- **Collective solutioning and cost effective implementation**
- **Rapid problem solving and combined learning**
- **Shared evidence building and ecosystem development**

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**Bharat EdTech Initiative, a multi-stakeholder collaborative**

- **EdTech Partners**
  - Product licenses, Field orientation and problem solving support, Data sharing
- **Community Partners**
  - Student onboarding, Drive engagement through support, nudges and routines, Data sharing
- **Program and Fund Management Partners**
  - Assessment Partners
  - Competency based assessments to measure learning levels
- **Anchor Funders**

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**Strategy and Implementation**

**Anchor Funding**

**Fundraising & Fund management**
In Year 1, Bharat EdTech Initiative has successfully enabled access to EdTech for students from low-income backgrounds

**Last mile EdTech access**

In Year 1, Bharat EdTech Initiative worked with EdTech providers to provide curriculum aligned content to students from families with monthly income of less than INR 25,000. These students were provided EdTech content at zero-cost.

- **96,000** Students from grades 1 - 10
- **46%** Girls
- **70%** From rural areas
- **80%** From Government Schools
- **30 partners** In India’s largest EdTech collaborative

**Assessment Partners**

- ConveGenius
- DETAILED ASSESSMENT
- TRIIUM

**EdTech Partners**

- BYJU'S
- ConveGenius
- Mindspark
- toppr
- Vedantu
On-ground EdTech adoption

To drive on-ground engagement, Bharat EdTech Initiative identified organisations with extensive experience of working with communities to drive learning behavior change. These organisations identified students and designed customised programs to establish sustainable learning routines.

500k+
Learning hours across 8 months

~1 hour
Average weekly at home learning by active students

5x
Usage compared to paid subscribers*

Improvement in learning outcomes

Competency based assessments* were conducted in Mathematics, Science and Language for a sample of students from grades 3, 6, and 8. Convegenius Insights conducted the assessment and analysed the results. The survey tools were created by Trivium and Educational Initiatives Detailed Assessments.

45%
Students grew by one of more Equivalent Years of Schooling (EYOS)*

30%
Students grew from basic to intermediate proficiency in Maths across grades 3, 6, and 8

Community Partners

Funders

*Refer to the Glossary
Through a data driven approach and on-ground monitoring, Bharat EdTech Initiative has developed actionable insights to drive EdTech adoption at-scale.

**Student Learning Journey with Bharat EdTech Initiative**

Each student in the Bharat EdTech Initiative was provided access to an EdTech product, and mapped to partners who worked 1:1 and in groups to drive engagement and learning on the platform.

- **Student and EdTech product matching**
- **Content delivery aligned to learning levels**
- **Customised learning routines* and nudges**
- **Regular learning assessments**
- **Rebasing content to new learning levels**

**Key elements for successful adoption of EdTech**

Observing a student’s learning journey in Year 1, Bharat EdTech Initiative has identified three critical elements, that need to work together for successful adoption of EdTech.

- **High quality, Bharat ready EdTech product**
- **Enabling environment at home/in community**
- **Dedicated on-ground support and learning routines**

*Refer to the Glossary
High quality, Bharat ready EdTech product

In Year I, students had access to 3 types of EdTech products – asynchronous, synchronous, and low tech*. Weekly engagement data was tracked on the learning platforms that provided insights on EdTech usage and uptake.

**Key observations on engagement trends**

1. **Higher proportion of students were active on a weekly basis on asynchronous and low-tech products** compared to synchronous products

2. **Average weekly usage** by active users was higher for asynchronous products (110 to 260 minutes) as compared to synchronous products (90 mins)

3. On-ground feedback indicates greater student interest towards byte sized, low-tech, multi-use case content, in regional languages, with features such as doubt resolution and test preparation

**Insights and recommendation on EdTech platform suited for Bharat’s students**

1. **Asynchronous and low-tech products are better suited for Bharat’s students** due to low data requirements and flexible usage routines

2. With access to a **dedicated device and internet**, synchronous products become more viable

3. Bharat’s students engage best with **learner centric products**, that cater to their **learning levels and needs**

*Refer to the Glossary
To ensure effective learning, while access to relevant EdTech products is necessary, it is not sufficient. It is more important that students are motivated and interested to learn and engage on the EdTech platforms, have access to devices, and the support of compassionate adults to guide and support them in their learning journeys.

**Key observations on enabling environment**

79% of the total onboarded students logged onto the EdTech platforms throughout Year 1

-24% students were active weekly users*; remaining students were intermittent users, primarily due to lack of consistent guided support

21% students dropped out in the early stages of the program due to inadequate access to devices in the household

Students in BEI’s Hardware Pilot spent 5 times more time on EdTech platforms compared to other students

**Insights and recommendation to ensure the right enabling environment**

1. **Role of a compassionate adult is key to ensure a strong and sustainable learning routine** for students. These adults could include parents, teachers, or local volunteers. It is critical to identify them early and co-create program strategies with them.

2. **Detailed student information** on device access, learning levels, parent support, etc. is critical to build customised engagement strategies. It is important to collect detailed information during student identification and onboarding.

3. **Predictable access to a device** is important for consistent EdTech engagement. Typically, in a household with two or more devices, there is a stronger chance that a device will be available for the student to access the platform.

   Where students do not have access to a device, community partners can drive engagement through strategies such as peer learning groups, digital library, and community classes. These have proven to be effective from a engagement and learning lens.

*Refer to the Glossary*
During the program, implementation partners followed multiple contextualized models to identify, onboard, and engage students.

**Three deployment models** were followed, based on the compassionate adult who supported the student and the physical space where students accessed the EdTech platforms. Through these deployment models, students were encouraged to create learning routines.

**Teacher Driven at home learning**
Teachers nudge students to use curriculum aligned or remedial EdTech content at home

**Parent/Volunteer Driven at home learning**
Parents/Community volunteers nudge and guide students to use the product at home

**Volunteer driven community learning**
Community volunteers organize after school spaces for students to learn together on EdTech

### Student distribution across models in Phase I

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<tr>
<td>31%</td>
<td>25%</td>
<td>44%</td>
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</tbody>
</table>

### Key observations on engagement trends across deployment models

1. **Significant shift in student onboarding and engagement** across cohorts as a result of hyper-local support and dedicated learning routines

Localised and contextualized routines such as after-school ‘rotational tab model’ and guided support led to a marked improvement in engagement. These strategies were customised based on student context and EdTech usage.

*Refer to the Glossary*
It is essential to build the ‘school to home learning continuum’ to ensure sustained routines, student engagement and learning.

Students who were nudged by their teachers to attempt weekly quizzes showed greater consistency in engagement.

![Graph showing % Weekly Active Users across Models](image)

Student engagement declined in November and December due to school closures and festivals and in March due to school exams and summer breaks.

![Graph showing % Weekly Active Users](image)

**Insights and recommendation on EdTech adoption across deployment models**

**1** Differentiated deployment models are essential to cater to diverse student learning needs and to design interventions that are aligned to the local context. These models must be regularly reviewed based on weekly engagement data. Monitoring student level usage data is key.

**2** It is essential to build the ‘school to home learning continuum’ to ensure sustained routines, student engagement and learning.

**3** EdTech license rollout and student onboarding is time and resource intensive. It is ideal to start the process before the school year to align with school calendars, and maximize time on the platform.

**4** Robust data systems are essential to track, understand and document the impact of different deployment models, on-ground engagement activities and nudges.

*Refer to the Glossary
Impact Stories

Children built a habit of solving questions through weekly quizzes. This habit leads them to reflect on questions they are unable to solve. They practice those concepts and again solve the question and this feedback loop helps them learn better.

SHALINI
Grade 9, Rajkiya Balika Mahavidyalaya Tapukara, Alwar, Rajasthan.

Students find online applications very interesting and useful. They compete among themselves to solve for saturday quiz. This increases curiosity and thus helps in knowledge creation.

NILAM YADAV
Principal, Rajkiya Balika Mahavidyalaya Tapukara, Alwar, Rajasthan

Online learning has deepened my conceptual understanding of the subject. Currently we have it for English and Math. I would like a similar app for other subjects such as History, Geography and Science.

AROHI MANISHDAMLE,
Grade 6, Zila Parishad School Sinnar, Nashik, Maharashtra.

This rural area is backward and lacks good education facilities. Through online learning now students from this area also have an opportunity to access education like in big cities. I urge students to make optimum use of this opportunity.

VISHWAS SHUKLA
Uttar Pradesh, Milaan Foundation

The biggest challenge of online schooling was we had no medium to clear our doubts. Online app helped us in clearing doubts at home. Thank you Bharat EdTech Initiative.

SATYANKITA SINGH,
Grade 10, Bal Bharti Public School Jaithari, Anuppur, Madhya Pradesh.
To achieve its goals, in Year 2 Bharat EdTech Initiative will continue to keep students at the centre, and implement a few key strategic shifts

<table>
<thead>
<tr>
<th>Key Pivots in Year 2</th>
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<tbody>
<tr>
<td><strong>Student profiles for targeted on-ground implementation</strong></td>
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<tr>
<td>Collecting detailed student information (enabling environment, device availability, existing learning routines, motivation) to understand student needs, improve EdTech selection and mapping, and design relevant engagement strategies</td>
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<tr>
<td><strong>Democratising EdTech selection</strong></td>
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<tr>
<td>Choice of the appropriate EdTech platform for students to be made by community partners in consultation with students and field staff to ensure greater buy-in and uptake</td>
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<tr>
<td><strong>Strengthening last mile EdTech adoption</strong></td>
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<tr>
<td>Driving upfront alignment with community partners on student selection criteria, customized engagement strategies as per students’ learning needs, and timelines to ensure smooth on-ground implementation and focus on EdTech adoption</td>
</tr>
<tr>
<td><strong>Driving data enabled decision making and generating ecosystem evidence</strong></td>
</tr>
<tr>
<td>Enabling greater program efficiency and partner performance by collecting robust data, and driving data backed decision making pertaining to EdTech usage trends, and on-ground efforts; generating relevant public assets for the ecosystem</td>
</tr>
</tbody>
</table>
References

2. Simulating the Potential Impacts of the COVID-19 School Closures
3. ASER Report 2021 Wave 1
4. TOI-UNICEF, 42 pc girls allowed access to mobile phone for less than an hour a day: Survey

Glossary

1. **EdTech (in BEI’s context)** – Digital learning apps and platforms, for at-home learning, delivering curriculum aligned content to students in the form of video concepts, live classes, quizzes etc.
2. **Competency based assessments** – Assessments that focus on the student’s demonstration of learning outcomes and proficiency in particular “competencies” in each subject.
3. **EYOS** – Equivalent years of schooling is a global metric to communicate learning gains in concrete terms. 1 EYOS is equal to one year of schooling in terms of learning outcomes. The metric allows for a comparison of learning gains across disparate education systems around the world.
4. **Learning Routine** – EdTech usage processes or procedures that are consistently practiced by students. These routines could be time based (e.g. using the product every day from 6-7pm) or activity based (e.g. completing homework on the platform).
5. **Synchronous products** – Products and platforms that allow students to virtually attend a live session with a facilitator. Synchronous products may also offer additional use cases such as pre-recorded videos, mock tests, doubt clearance, etc.
6. **Asynchronous products** – Products and platforms that allow students to view instructional material at any time and does not include a live video lecture component. Common product use cases include pre-recorded videos, mock tests, bot based doubt clearance, etc.
7. **Low Tech products** – Chatbot/WhatsApp based products that offer practice, doubt solving, test prep, etc., as primary use cases. Low tech products consume less internet bandwidth as compared to asynchronous and synchronous products.
8. **Paid Subscribers study** – Benchmarking BEI students’ performance against the performance of retails users of select EdTech products. These products were a part of the BEI cohort.
9. **Byte Sized Content** - EdTech content delivered in small and easy-to-consume packet sizes

10. **Compassionate Adult / Primary Influencer** - The individual closest to the child who has the motivation, ability and means to influence the child’s learning routines at school/home/in the community.

11. **Deployment Model** - Set of routines, nudges, 1:1 and group interactions. that are employed by the community partner through the primary influencers (parent, teacher, community volunteer) to enable student engagement and learning on EdTech platforms.

12. **Nudges** - Nudges are updates and communications shared with the primary influencers and / or students through offline and online (product notifications, Whatsapp, SMS messages, calls) modes. These nudges are intended to reinforce the learning routines and motivate primary influencers and / or students to engage with the EdTech product.

13. **Active users** - Students who spend >=5 minutes on an EdTech platforms. Usage of 5 minutes has been defined as the minimum threshold keeping in mind the average time taken by a student to access a byte sized content.

14. **Weekly Active Usage (WAU)** - The average time spent by an active user on the platform in a given week

15. **Proficiency levels** - ConveGenius Insights conducts proficiency-based grading based knowledge and skills students are expected to learn as they progress through the year. There are 4 levels in each grade - Beginner, Basic, Intermediate, and Advanced. The cut-offs for proficiency levels are calibrated using the scale scores obtained through standardized assessments.