



EduDaan

Artificial Gravity

The Shri Ram School, Moulisari

Smart India Hackathon 2022

CURRENTLY IN INDIA...

25+ crore

Children between 5-
18 years old

2+ years

Of COVID-19 interrupting
their education

1:24

Average student-teacher
ratio



The diagram consists of three columns of text. The first column has '25+ crore' in bold, followed by 'Children between 5-18 years old'. The second column has '2+ years' in bold, followed by 'Of COVID-19 interrupting their education'. The third column has '1:24' in bold, followed by 'Average student-teacher ratio'. A horizontal line connects the bottom of the first and third columns. A vertical line descends from the center of this horizontal line, ending in a downward-pointing arrow. Below the arrow is the text 'LEARNING GAP' in bold.

LEARNING GAP

New Delhi: The recently concluded

[*National Achievement Survey*](#) 2021, which surveyed students and teachers from 1.18 lakh schools in 720 districts from rural and urban areas in the country, revealed that an acute learning loss has set in, in [*India*](#) during the covid-19 pandemic.

Learning gap created by COVID-19

Remedial tutoring improves learning outcomes

The JPAL researchers evaluated the impact assessment of the Balsakhi Program on student learning. The program consisted of a remedial tutoring education intervention implemented in schools in Vadodara and Mumbai, India. Balsakhi (tutor) identified and enabled learning at the right level for the students of grades 2, 3 and 4 who were falling behind their peers in learning outcomes. The Balsakhi typically met with a group of approximately 15–20 of these children in a separate class for two hours of the four-hour school day each day. The program evaluation indicated substantial positive impacts on children's academic achievement. In both Vadodara and Mumbai, the Balsakhi program significantly improved overall test scores by 0.14 standard deviations in the first year and 0.28 standard deviations in the second year. Largest gains were observed in math. The weakest student had gained the most.

Impact of personalized tutoring

2.7. Due to the scale of the current learning crisis, all viable methods will be explored to support teachers in the mission of attaining universal foundational literacy and numeracy. Studies around the world show one-on-one peer tutoring to be extremely effective for learning not just for the learner, but also for the tutor. Thus, peer tutoring can be taken up as a voluntary and joyful activity for fellow students under the supervision of trained teachers and by taking due care of safety aspects. Additionally, it will also be made far easier for trained **volunteers** - from both the local community and beyond - to participate in this large-scale mission. **Every literate member of the community could commit to teaching one student/person how to read**, it would change the country's landscape very quickly. States may consider establishing innovative models to foster such peer-tutoring and volunteer activities, as well as launch other programmes to support learners, in this nationwide mission to promote foundational literacy and numeracy.

National Education Policy 2020 mentioning volunteer tutors

Multilevel, age appropriate teaching spread over years to bridge learning gaps:

Based on the results of these pre-assessments, children can be grouped based on their learning levels. Children in each group should be taught based on their existing level. Revision of the already known concepts should also be built into the curriculum. Rather than packing everything into a three- or six-month bridge program, the curriculum has to be spread over two or three years in order for students to bridge their learning gaps. Students should be continuously evaluated to track their learning progress. These remedial classes can be conducted post the normal schooling hours for two to three hours every day. **Teachers need to be supported by other teaching assistants or volunteers** to implement these classes.

Report by KPMG and CII on the impact of COVID-19 and the road to recovery mentioning **volunteer-based individual teaching**

THE SOLUTION

**Connect students to the people who want to
help educate India's youth**

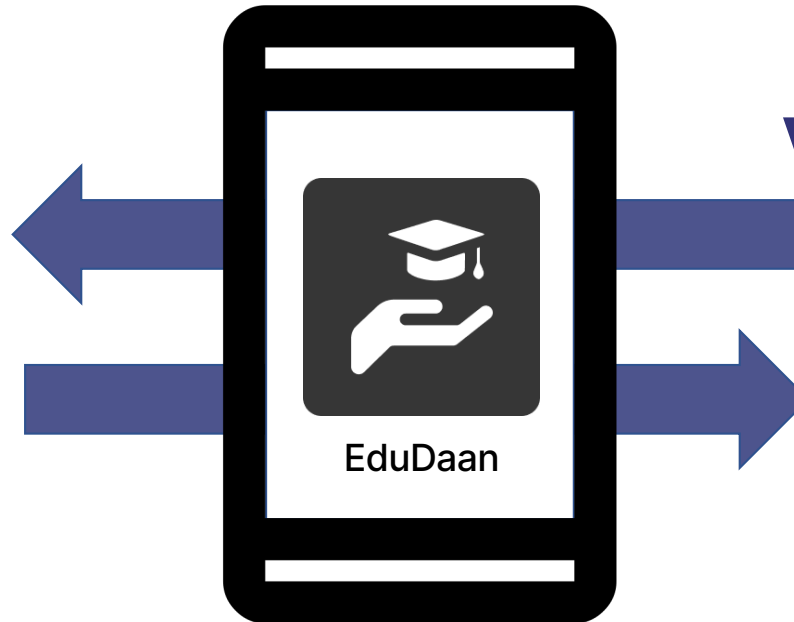
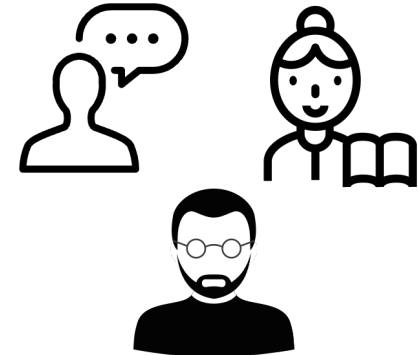


THE IDEA

STUDENTS



VOLUNTEERS



REGISTRATION



SEARCH



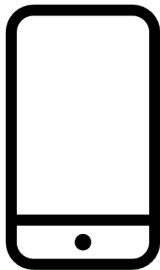
REQUEST



CONNECTION



KEY FEATURES



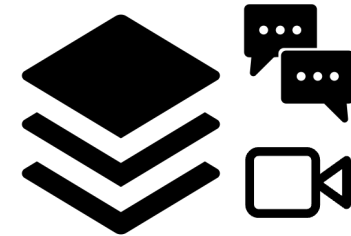
MOBILE APP

Free, lightweight mobile application for iOS and Android



DETAILED VOLUNTEER SEARCH

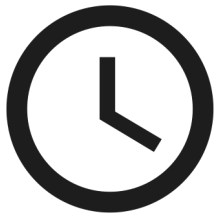
Based on city, languages, board, grade, and subjects



ALL-IN-ONE COMMUNICATIONS PLATFORM

Realtime chat + private zoom meetings

KEY FEATURES



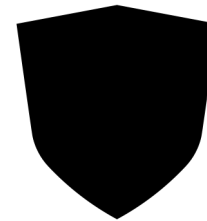
FLEXIBLE COMMITMENT

Volunteers teach based on their own availability and interest



SCHOOL INVOLVEMENT

Schools monitor their students through the web app



SAFE AND SECURE

Student activity visible to school + report button for all users

DEMO

TECH STACK

BACKEND



Django app + REST
API using Django
REST framework



PostgreSQL database
with Django ORM



Heroku servers to
host the web app and
API

MOBILE APP



Flutter for cross-
platform application



Firebase Firestore
database for real-time
chat



Flyer framework for
chat UI

WEB APP



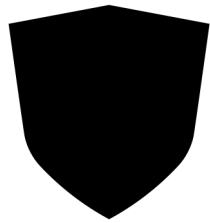
Bulma CSS framework
for an elegant and
responsive website

APIs



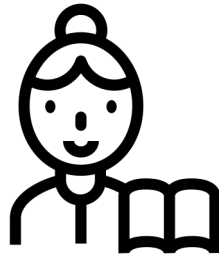
Zoom API for
automatically generating
meetings

FUTURE FEATURES



ADDITIONAL SAFETY FEATURES

Upload Aadhar card
and store zoom
recordings



TEACHER GUIDANCE

A student's teacher can
consult their volunteers
on customizing their
learning experience



LOCALISE UI

Translate the app
interface into non-
English languages



ADD GUIDANCE MATERIAL

Add training
modules to the app
for volunteers

CONCLUSION

- Address the need for individual attention
- Develop a vast student-volunteer network over time
- In line with National Education Policy's efforts to improve educational outcomes