

Enabling Adults with Less Education to support their child's education through hyperlocal educational videos

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The process

1

Secondary Research

- ✓ Literature Review
- ✓ Research Gaps
- ✓ Motivation
- ✓ Research Questions

2

User Studies

- ✓ Interviews
- ✓ User journey
- ✓ Persona & Scenarios

3

Analysis

- ✓ Thematic analysis
- ✓ Artefact analysis
- ✓ Generate codes and themes

4

Intervention Design(s)

- ✓ Design principles
- ✓ Learning theories
- ✓ Film making theories

5

Deployment & analysis

- ✓ Pilot studies
- ✓ Longitudinal studies
- ✓ Critical evaluation

6

Validation and deliverables

- ✓ Framework, theories
- ✓ Design guidelines
- ✓ Future scope

7

Solution Design

- ✓ Product design
- ✓ Testing
- ✓ Market launch

Adults with less education (ALEs)



Adults with education
<10th standard

248
million

Illiterate adults

+188
million

Adults studied till primary
school (5th Std)

+89
million

Adults studied till middle school
(8th Std)

+81
million

Adults studied till middle school
(10th Std)

School education in India (ASER 2018)



- ▲ School enrolment
- ▼ Student performance

98% of children of the age 8, and 87% of children of the age 15-16 are enrolled in schools in rural India.

Only 44% of standard 5 children and only 69% of standard 8 children in government schools could read standard II level text. In 2008, the corresponding numbers were 53% and 83% respectively

Literature Review

Parental engagement in their child's education is one of the important predictors of the child's academic success.



Parental engagement in developed economies



Full access
3,397
Views
252
CrossRef citations to date
6
Altmetric

Original Articles

Present and Accounted for: Improving Student Attendance Through Family and Community Involvement

Joyce L. Epstein The Johns Hopkins University & Steven B. Sheldon The Johns Hopkins University
Pages 308-318 | Published online: 01 Apr 2010

- Download citation
- <https://doi.org/10.1080/00220670.2009.966041>

Original Articles

Present and Accounted for: Improving Student Attendance Through Family and Community Involvement

- References
- Citations
- Metrics

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Improved academic performance

Reduction in school dropout

Improved attendance

Better student engagement

Improved social and adaptive skills

Parental engagement in Indian Context

Least studied

Poorly implemented in the school
and at home



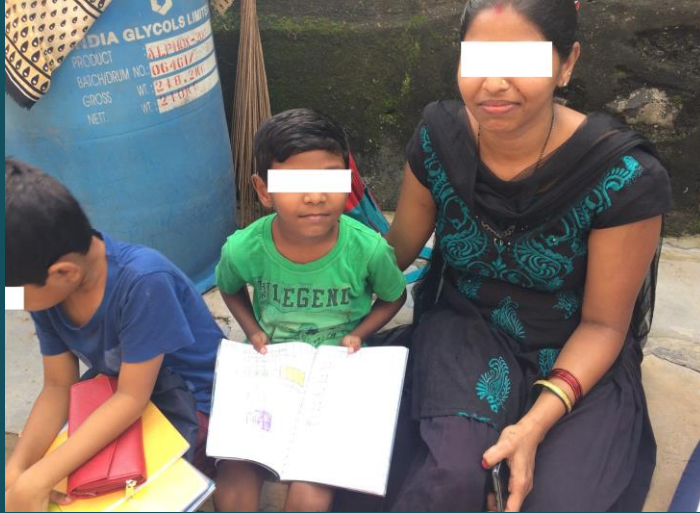
Research questions



What are the barriers and opportunities to engage ALE parents in their children's education at home?

How could a video-based intervention facilitate engagement of ALE parents in their children's education?

Study design



User studies

- Interviewed 113 ALE Parents
- 3 home visits
- 1 child care center visit in Maharashtra and Odisha

Scenario

1



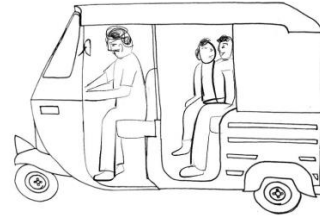
Mahesh is a father of two children and he drives an auto for earning.

2



Both Mahesh and his wife are 6th standard educated and send their children to a govt. school

3



Mahesh goes to work at 6 am and comes back at 9 pm

4



After coming back home Mahesh spends a happy time with his family

5



Mahesh brings pens and other study materials for his children

6



Mahesh sometimes discusses about how to guide children with his passengers

Contd....

Scenario

7



Mahesh is worried about his elder child who failed in the last exam in spite of tuition classes. Now Mahesh wants to involve in his studies but he is least confident.

8



A child needs personal attention and feedback

Revision is also important

9



Mahesh now gets educational video content and activity guidance on the phone.

He shared such videos with his wife.

10



Mahesh's wife now could able to guide her son in Mahesh's absence and child's performance is getting better.

User studies – Findings from affinity mapping

Parents have less education and lower self efficacy

Academic discussion is not a common practice

English becomes a barrier, since parents don't know English.

Parents' need additional help to ask questions

Parents are busy with livelihoods

Study design



Interventional study

- Designed 4 hyperlocal educational video prototypes
- Deployed with 12 parents for 2 weeks

Interventional Study

METHOD



LAPMEMS
School, Pune



Action Research
methodology

4



4 educational
video prototypes

6th



Worked with the
**6th Grade Maths
teacher**

INTERVENTION DESIGN

4



4 educational video prototypes
“**explainer video**”
“**guider video**”
“**discussion video**”
“**homework video**”



Summarise concepts and/or gave
action items



Video made < 3 minutes



Less production support

DEPLOYMENT

12



2W

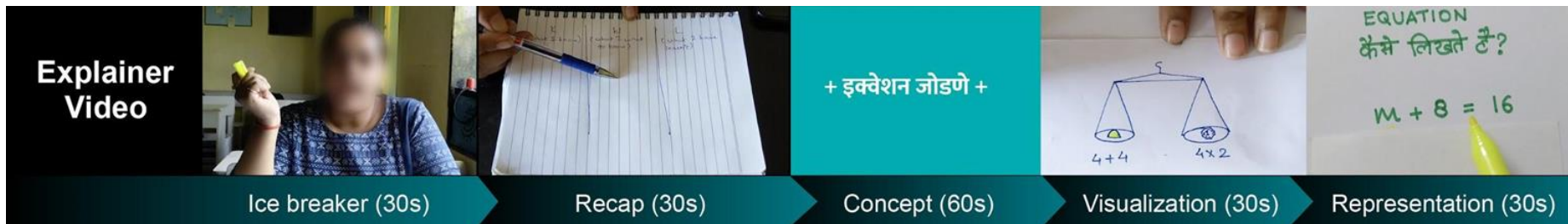


Videos were sent to 12 parents
(Education < 10th std., Age: 25-35, 4
males and 8 females) for two weeks
over WhatsApp

Videos were made on content taught
in the morning class and sent to the
parents in the afternoon, when
children reach home from school

Intervention Design

1. Explainer video:



This video aims at **informing parents about lessons** taught in the Mathematics class.

The video covers a few key concepts related to equations so that they would feel **confident to discuss the topic** with their children.



Hyper-local video

uses children's own notebooks, locally relevant examples and language

Intervention Design

2. Guider video:



This video was made to **model a successful parent-child interaction** - with the aim of **building parent's belief** in these activities.



Video was shot with a parent and a child from the community.

Intervention Design

3. Discussion video:

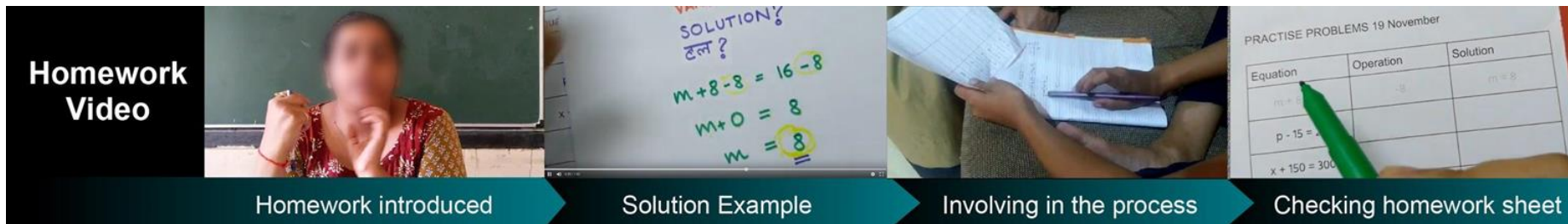


The discussion video included prompts for the parents to **discuss the specific topic** covered the same day in school.

The purpose of this video was to help parents **assess their child's understanding** and **provide individual feedback**.

Intervention Design

4. Homework video:



In the homework video, the teacher **describes the homework** that was given on that particular day.

She instructs the parents on how they could get involved in **helping with homework** and **assessing it**.



The video was made to accompany a homework sheet

Video was shot with the teacher

Interventional Study - Deployment



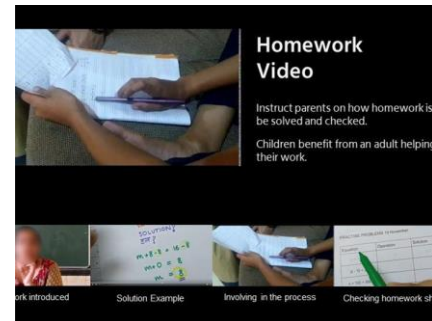
1. Explainer video



2. Guider video



3. Discussion video



4. Homework video

DEPLOYMENT

12



2W



Videos were sent to 12 parents (Education < 10th std., Age: 25-35, 4 males and 8 females) for two weeks over WhatsApp



3, 8, 15



Followed up with the parents on days 3, 8 and 15 after the deployment of the first video



Conducted semi-structured interview in the end

Interventional Study – Questions for parents

Did you watch the video shared yesterday?

Do you remember the example to explain equations?

Did your child complete all her homework questions?

Which video did you like the most?

Did you notice the parent help the child in the video?

Interventional Study – Findings from affinity mapping

Most parents
did not watch
the video

Parents became more
aware and did check
the child's progress

Marathi language
in the video was
much appreciated

Parents found
the discussion
video to be most
useful

Children were not
positive about
parent led activities

Key takeaways

The problem is complex and hard.

Parents need to know why their engagement matters in their children's education. Conducting workshops and discussion sessions would help.

Academic engagement of parents is not common. Interventions need to focus on building more on that.

Hyperlocal videos have a great potential. However, ALE parents require consistent motivation and support to get engaged.

Product overview

Android App

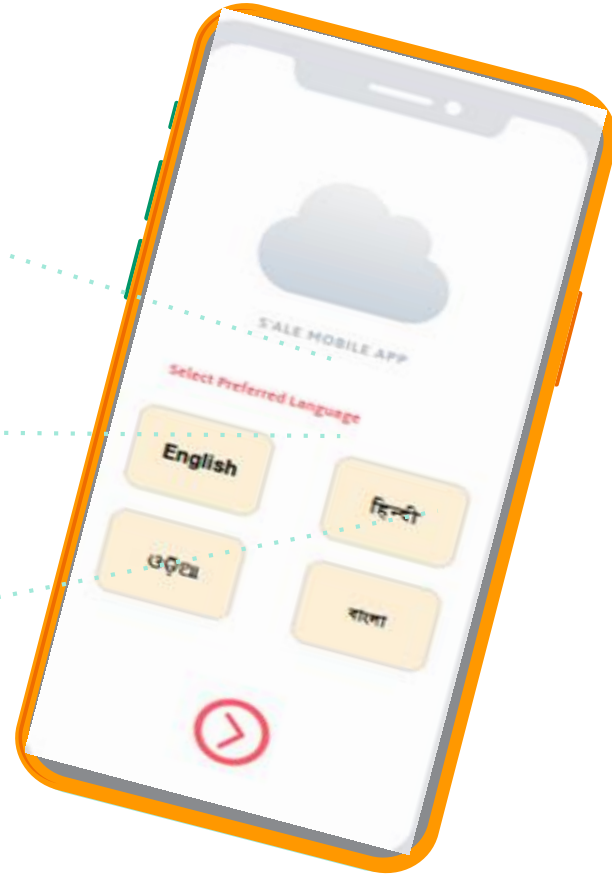
1

Easy to go content

2

Simple & Sleek

3



App Development

Design

Wireframes Done !!



Development

Ongoing !!

Android, **Flutter** & Native App Dev

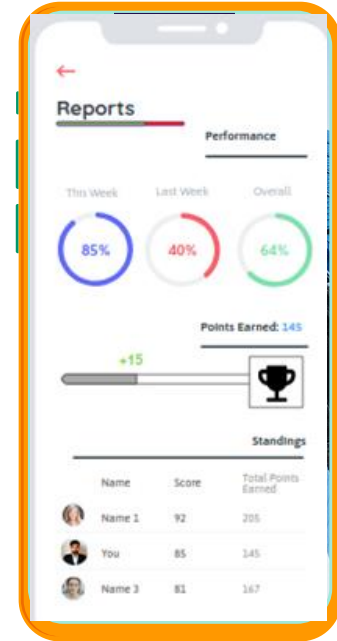
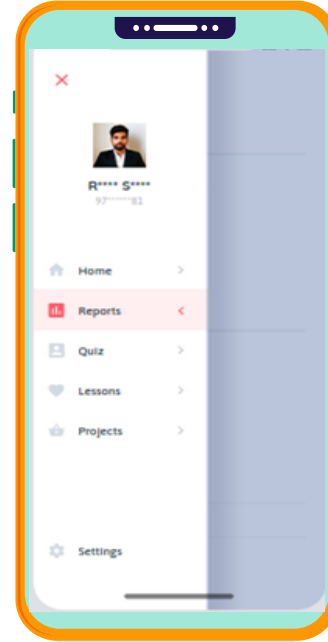


Key Features

Rewards and Recognition

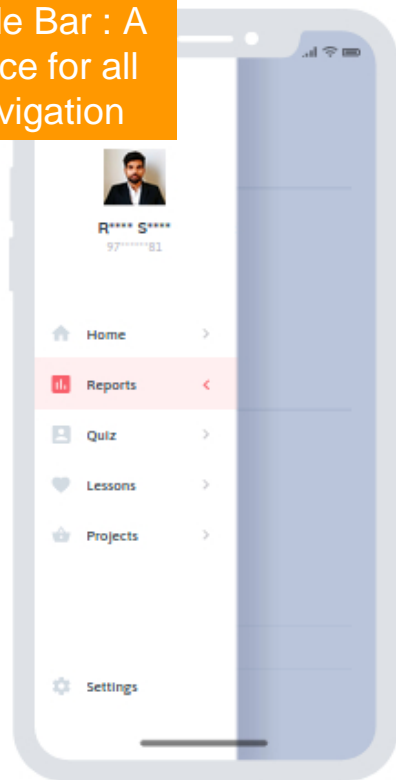
Formative assessment by Parents

AI based recommendation



Screens (work in progress)

Side Bar : A place for all Navigation



Quiz

Timer

Topic: X

Date : 31/2

Prize: XYZ

Starts in
3d : 10hr : 15min

Practice
Test

Lessons

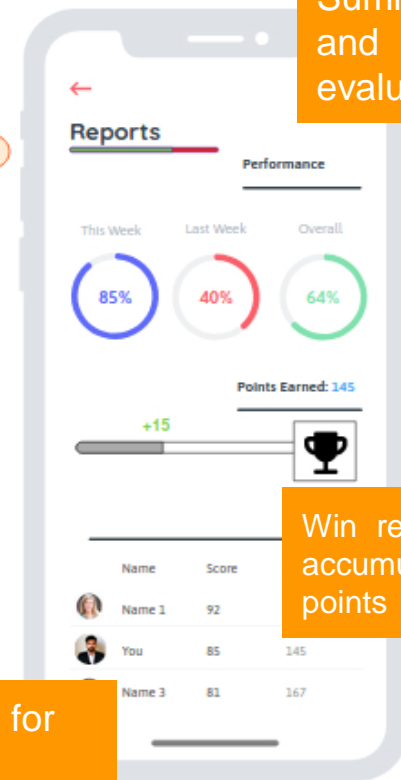
Earn More Points

- Refer a friend +5
- Complete lesson +10
- Score 50% in practice test +25

Test with
live quiz and
practice test

Reports

Summative
and formative
evaluation



Win rewards by
accumulating
points

Rankings for
weekly
competitions

Thank You

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