



Research on Affordable Private School Preprimary Teachers

PROGRAM TO IMPROVE PRIVATE EARLY EDUCATION (PIPE)



Glossary of terms (1/2)

- Affordable Private Schools (APSs): Schools that charge fees up to INR 28,500 per annum, and typically provide education up to grade 10
- Early Childhood Education (ECE): The formal education a child receives between the ages two through five. Typically early childhood is considered to range from birth to age six, this narrower definition has been chosen to reflect the research's interest in the years when formal pre-primary education is typically provided in India
- English-medium education: Education where the language of instruction is English
- Markers: Indicators or signs that parents use to assess whether their child is learning
 - Markers to test recall: Questions used by parents to assess their children for content memorized using rote methods (e.g., asking the child to recite numbers)
 - Markers to test concepts: Questions used by parents to assess their children's conceptual understanding of any topic (e.g., asking the child to count items)
- Preschooling/ Pre-primary classes: All formal educational classes prior to first grade
- Program to Improve Private Early Education (PIPE): Program that aims to replace rote with activity based learning in all 300,000 APSs in India
- Activity based learning (ABL): Learning through structured play-based activities, games, and experiences that provide developmental benefits across the cognitive, physical, and socio-emotional domains
- **ABL solution provider:** Private companies providing ABL solutions including curriculum materials, teacher training and continuous support for proper implementation of the program
- Partner: Private companies that have partnered with PIPE and provide high-quality ABL solutions to APSs
- **Partner solutions:** Play/ activity based programs including curriculum materials and continuous support for proper implementation of the program, provided by PIPE partners

Glossary of terms (2/2)

- PIPE teachers: Teachers teaching in APSs served by PIPE partners
- STARS: Scoring Tool for Assessing Readiness at School to assess the impact of ABL in APSs
- PIPE APSs: APSs using PIPE partner solutions
- Control APSs: APSs using no external interventions
- Full curriculum PIPE APSs: PIPE APSs using full school curriculum
- Single subject PIPE APSs: PIPE APSs using single subject curriculum
- 1 year PIPE APSs: APSs with partner solutions for 1 year
- 2 year PIPE APSs: APSs with partner solutions for 2 years
- 3 year PIPE APSs: APSs with partner solutions for 3 year
- 4 year PIPE APSs: APSs with partner solutions for 4 years

Contents

1 Research objectives and design

- 2 Typical APS pre-primary teacher profile
- 3 Challenges faced by APS pre-primary teachers
- 4 Recommendations for ABL solution providers
- 5 Introduction to PIPE and FSG Inclusive Markets

Objectives

- Understand factors affecting how pre-primary teachers in affordable private schools (APS) implement activity based learning (ABL) solutions, by studying:
 - APS teachers' mind-sets
 - APS teachers' journey with ABL solutions
 - Challenges faced by APS teachers in implementing ABL solutions
 - Practices from current interventions which have helped APS teachers in their implementation of ABL solutions
- Recommend practical and feasible solutions for ABL solution providers to improve implementation

Format of field research

25 pre-primary teachers from 13 APS across 3 cities and covering 5 ABL solutions were individually interviewed for 45-60 minutes, each



Contents

- 1 Research objectives and design
- 2 Typical APS pre-primary teacher profile

2a Portrait of a typical APS teacher

- 2b Journey of APS teacher with ABL solution providers
- 3 Challenges faced by APS pre-primary teachers
- 4 Recommendations for ABL solution providers
- 5 Introduction to PIPE and FSG Inclusive Markets

Portrait of a typical APS teacher



- 29 year old working mother
- Earns INR 7,500 per month
- Has been teaching for 5+ years
- Has completed 12th grade
- Has not received any formal teaching training
- Lives with her family next to the school

We have segmented APS teachers as 'poor' and 'good' implementers of ABL

'Poor' implementers¹

- Rely on rote memorization-based learning
- Follow a lecture-based model where children participate through rote or choral repetition
- Interact with children mostly as a large group
- Ask rote-based or close-ended questions to test recall of information
- Have poor understanding of child learning outcomes



- Use ABL in classroom
- Teach concepts using materials and interactive activities e.g., flashcards
- Interact with children individually or in small groups
- Ask open-ended questions to test understanding or to stimulate reasoning
- Have good understanding of child learning outcomes

We developed portraits based on context, expectations and perceptions of APS teachers that drive implementation quality

Context

- What is their household context?
- What is their daily schedule?
- What is their classroom set-up?
- What support do they get from the school's management to implement ABL?

Expectations

- What are their expectations from their job?
- What do they want to experience by teaching?

Perceptions

- What is their perception on the way children learn?
- What are their beliefs on their role?
- What are their beliefs on non-traditional curricula?

Implementation quality

Typical APS teacher portrait of 'poor' implementer

Context

Personal

- Lives with husband and children
- Values teaching as a respectable profession
- Teaches in a school from 8:30am to 4:00pm
- Spends the rest of the day looking after children and doing household chores

School

- Teaches a class of ~40 students
- Receives limited support/ oversight from school management
- Directed by APS administrator to implement ABL solution without proper introduction
- Implements both traditional curriculum and ABL curriculum
- Has no access to materials required to implement ABL due to limited budget or limited material kits

Expectations

Non-teaching role

- Wants to be a good parent
- Would like evenings to remain free in order to complete household chores and take care of children

Teaching role

- Wants to feel valued for work
- Wants to feel in control of classroom
- Aims to finish syllabus on time
- Prefers 'proven' teaching techniques due to familiarity and to avoid parent complaints

Perceptions

Teaching

- Believes children learn by repeating lessons
- Believes learning outcomes are demonstrated by ability to recall what has been taught
- Believes parents' satisfaction and completion of curriculum on time mark success as a teacher
- Believes it is necessary to give writing work in class and homework

ABL

- Believes the ABL curriculum does not prepare students for grade 1
- Believes children in other schools with non-ABL curricula are learning faster and more content

Typical APS teacher portrait of 'good' implementer

Context

Personal

- Lives with husband and children
- Values teaching as a respectable profession
- Teaches in a school from 8:30am to 4:00pm
- Spends the rest of the day looking after children and doing household chores

School

- Teaches a class of ~30 students
- Receives support/oversight from a coordinator or headmistress, who addresses implementation concerns as prescribed by ABL solution provider
- Introduced to benefits of ABL by ABL solution provider
- Implements ABL curriculum
- Has access to materials required to implement ABL curriculum, through school

Expectations

Non-teaching role

- Wants to be a good parent
- Would like evenings to remain free in order to complete household chores and take care of children

Teaching role

- Wants to feel valued for work
- Wants to feel in control of classroom
- Aims to teach children concepts like counting items and reading new words
- Prefers ABL as the teaching experience is more engaging / diversified

Perceptions

Teaching

- Believes children learn by doing activities and not through rote learning
- Believes children demonstrate conceptual understanding by answering analogous questions on the concept
- Believes children's learning outcomes mark success as a teacher
- Believes it is necessary to keep students engaged during class

ABL

- Believes conceptual learning is important for children to do well in future
- Understands it takes more time to teach children concepts, e.g., reading and counting

Different from 'poor' implementers

Contents

- 1 Research objectives and design
- 2 Typical APS pre-primary teacher profile
- 2a Portrait of APS teacher

2b Journey of APS teacher with ABL solution providers

- 3 Challenges faced by APS pre-primary teachers
- 4 Recommendations for ABL solution providers
- 5 Introduction to PIPE and FSG Inclusive Markets

Typical journey with ABL solution providers for 'poor' implementer



Ideal journey with ABL solution providers for 'good' implementer



Contents

- 1 Research objectives and design
- 2 Typical APS pre-primary teacher profile
- 3 Challenges faced by APS pre-primary teachers
- 4 Recommendations for ABL solution providers
- 5 Introduction to PIPE and FSG Inclusive Markets

8 key mindset barriers and implementation challenges faced by APS teachers hinder proper implementation of ABL¹

Mindset barriers



Believe they are not accountable for implementing ABL

Believe children are learning concepts through rote techniques



Believe traditional curriculum is more effective than ABL curriculum



Overwhelmed by the amount of new content



Unable to understand trainings and manuals

Implementation challenges



Unable to address parent complaints

Unable to manage classrooms when implementing ABL

8

Burdened with additional workload when implementing ABL

-¹In addition to these 8 common barriers and challenges faced by APS teachers, other external factors like timely delivery of materials, accessibility toadequate number of material kits, student-teacher ratio etc. also affect the quality of ABL implementation. However, these factors have not been covered in detail in this document. ABL solution providers must identify the most relevant challenges and then address them accordingly. For detailed best practices on teacher training, parent engagement and implementation of ABL solutions go to <u>https://www.fsg.org/best-practices-solution-providers-</u> <u>affordable-private-school-market-urban-india</u>

Barrier/ challenge description (1/3)



Barrier/ challenge description (2/3)

Barrier/ Challenge	Description	_	Quotes/ Examples
4 Overwhelmed by the amount of new content	 Introduced to multiple new concepts, approaches and materials Inadequate time between training and implementation to absorb all the new content 		<i>"Initially, I would get mixed up between all the material the solution provider had sent to us, especially with workbooks as I didn't know when to use which"</i>
Unable to understand trainings and manuals	 Content includes use of technical terms without explanations, e.g., motor skills, age appropriate development 		"I couldn't understand what was taught to me. I was confused by the usage of technical names such as physical domain, motor skills"
	 Most content is in English whereas teachers are more comfortable with local languages 		<i>"In the training they taught us the easy activities, but when I had to prepare myself I could not understand the description of the presentation steps"</i>
6 Unable to address parent complaints	 Unprepared or untrained to address parent queries regarding the new program/ curriculum Unconvinced about the benefits of the ABL solution 		"Some parents are unhappy that children in other schools learn to count and read from the beginning of the year, while their children spend time coloring in their workbooks"

Barrier/ challenge description (3/3)

Barrier/ Challenge	Description	Quotes/ Examples
Unable to manage	 Unable to manage children during activities as children tend to get excited and become difficult to manage 	"It took me 2 weeks to get the students settled"
classrooms when implementing ABL	 Classroom management techniques not demonstrated during the teacher trainings 	"At the start, I faced some issues implementing the activities as the students would start running around"
	 Not used to conducting activities in small groups 	
Burdened with additional workload when implementing ABL	 Continue to implement a traditional curriculum with the ABL curriculum 	"Before ABL it would take me 1 hour
	 Spend significant additional time reading lesson plans and preparing for the activities 	every week to prepare for my classes, now it takes 1 hour every day"
	 Need to source materials or think of alternatives if the required materials are hard to procure 	"I have more work this year. Since there is no writing work in the ABL curriculum we have added some writing books whic
	 Need to attend trainings on holidays 	is hard to complete on top of the activities"

Contents

- 1 Research objectives and design
- 2 Typical APS pre-primary teacher profile
- 3 Challenges faced by APS pre-primary teachers

4 Recommendations for ABL solution providers

5 Introduction to PIPE and FSG Inclusive Markets

ABL Solution providers can address these 8 barriers and challenges through 4 staged solutions



These solutions involve incremental content modification and leveraging existing processes (1/2)

Solution	Description	 Implications Product team to identify and make the relevant changes arrange for additional materials to be bundled hire professionals for illustrations in the manuals, translation of instructions into local languages and creation of videos/ animations for instructions update implementation and sales teams Finance team to review product pricing Implementation team to train the learning managers to use the updated product Sales team to train sales force on revised product offering					
a Align core product to APS market	 Provide prescriptive weekly/ daily lesson plans Bundle key materials for activities within the program offering Design teacher manual with visual instructions in the form of pictures instructions in English and local languages minimal technical terms or explicit explanations use of simple language tips on how to assess conceptual learning for each concept Provide teaching instruction in the form of videos/ animations 						
b Involve teachers in sales process	 Ensure teachers are present for product demonstration during sales pitch to get their buy-in on the solution familiarize them with the ABL solution explain the benefits of the ABL solution set APS administrator expectations to give teachers time and space to adjust to the new 	 Sales team to update the sales pitch and format to involve teachers and interact with them train team on engagement with teachers (e.g., benefits to focus on, activities to demonstrate) 					

program

These solutions involve incremental content modification and leveraging existing processes (2/2)

Solution	Description	Implications				
C Align teacher training to APS context	 Divide training content into multiple tranches Use demonstrations, roleplays and mock planning sessions Include practical training on classroom management Use simple and local language Explain relevant technical terms with simple examples Explain the difference between rote learning and conceptual learning using simple examples Set expectations around initial challenges that teachers will face with simple solutions to address them Provide teachers with written responses to parent FAQs 	 Implementation team to update the training agenda and create additional collateral e.g., parent FAQs train the learning managers to use the updated agenda and collateral 				
d Provide teachers continuous support	 Conduct periodic classroom observation sessions with feedback on implementation Include short and regular refresher trainings, post classroom observations Create WhatsApp groups for teachers to get support on implementation concerns Conduct parent engagement sessions at the school to explain how and why the program might be different from traditional learning methods 	 Implementation team to update the engagement calendar train the learning managers to implement the updated calendar arrange for resources (e.g., phone, SIM) to create and manage WhatsApp groups 				

address specific parents concerns

These solutions involve 2-6 months of lead time to plan and build internal capacity

Solution	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Owner
a Align core product to APS market						Update produc	d Produ ot and	uct printi bundlin		oduct batched					Product team
b Involve teachers in sales process				ed sales trained eam		bitch									Sales team
C Align teacher training to APS context							ı		odated tr enda an		Con eral teac	ducted u her train			Implementation team
d Provide teachers continuous support								C	Jpdated alendar rainers			itiated ir fupdate alendar			Implementation team

Planning and preparation



Using/ implementing updated content

Contents

- 1 Research objectives and design
- 2 Typical APS pre-primary teacher profile
- 3 Challenges faced by APS pre-primary teachers
- 4 Recommendations for ABL solution providers

5 Introduction to PIPE and FSG Inclusive Markets

Overview of FSG Inclusive Markets (IM)

Mission	To improve opportunities, agency, and choice for families with low- income by working with companies to serve families as customers (and not with non-profits to serve them as beneficiaries)							
Vision	To demonstrate profitability of offering inclusive products, services, or practices (e.g., housing, education, employment) that benefit families with low-income							
	Run multiyear programs to address barriers that prevent companies from offering inclusive products, services or practices							
	 Talk to thousands of families to understand their needs, aspirations, and challenges 							
	 Talk to hundreds of CXOs and managers to understand their business, ecosystem, regulatory and operational challenges 							
Approach	Co-create, pilot and rollout solutions with companies to address barriers and profitably scale inclusive products, services, or practices							
	 Publish and disseminate public goods (e.g., primary research, best practices, business model) to get more companies to offer the product, service or practice 							
	Address ecosystem barriers (e.g., policy suggestions) to make the market more conducive							

Overview of PIPE



Replacing rote¹ with activity based learning² in affordable private schools³ could improve learning outcomes for ~50% of children

~50% of children in India are enrolled in affordable private schools

- 40% of children in rural India are in private schools⁴
- 86% of families with lowincomes in urban India send their children to affordable private schools (APSs)⁵
- 54% of children in South Asia are enrolled in private schools for pre-primary education⁶

Current learning outcomes are poor due to rote teaching

- 35% of Grade 10 students can read at Grade 4 level⁷
- 84% of Grade 1 students can't read at grade level⁸
- Most private preschools follow mainly rote teaching with no age appropriate activities⁹

Adopting activity based learning in early years can provide the right educational foundation

- Poor learning outcomes in the early years leads to poor learning and life outcomes later¹⁰
- Children learn best using activity based learning (ABL) in the early years (ages 3-8)¹¹
- Intervening in the early years gives the highest return on investments¹²

- 1. See example of rote teaching here
- 2. Learning through structured play-based activities, games, and experiences
- 3. Schools that typically charge fees under INR 1,500 (USD 23) per month, and offer classes from nursery to grade 10 or 12
- 4. ASER 'Early Years' Report (2019)
- 5. PIPE research based on 4400 interviews with families with low-incomes (2015)
- 6. UNICEF 'A world ready to learn' (2019)
- 7. Education Initiatives research based on an assessment of 50,000 students in Gujarat, Maharashtra and Rajasthan (2013-14)
- 8. ASER 'Early Years' Report (2019)
- 9. CECED, ASER, and UNICEF 'The India Early Childhood Education Impact Study (2017); PIPE research
- 10. S Lockhart, Play: An Important Tool for Cognitive Development (2010)
- 11. M. Hohmann, D.P. Weikart, 'Educating Young Children: Active Learning Practices for Preschool and Child Care Programs' (1999)
- 12. J Heckman and D. Masterov, The Productivity Argument for Investing in Young Children (2004)

Barriers to adoption of ABL are lack of demand and low willingness to serve APS market

APS administrators, teachers and parents are not demanding ABL

- Limited awareness of poor learning outcomes in children
- Limited awareness on the benefits of ABL
- Current rote memorization technique meets parents' demands

Solution providers¹ don't see a business opportunity to sell in the APS market

- Unclear business model to acquire and sell to APSs
- Fragmented market
- Unclear proposition for APS customers
- Lack of quality standards/ robust tools to assess quality

1. Solution providers are existing private companies currently providing ABL solutions including curriculum materials, teacher training and ongoing support to schools serving students from families with mid or high incomes

PIPE's vision is to replace rote with ABL in all 300,000 APSs in India





1. Stakeholders are APS administrators, teachers and parents

2. Skills include numeracy, early language skills, executive function, motor skills and socio-emotional skills

Scale supply: PIPE partners are providing ABL to >150,000 children across 750+ APSs



© FSG | 32

Activities

- Identified, convinced and signed-up 8 partners to the serve the APS market
- Developed a profitable business model for the APS market
- Identified barriers and developed 23 best practices across 4 business functions (i.e. product, sales, implementation and management) to support partners to profitably scale in the APS market
- Supported PIPE partners to co-develop an effective organization structure and team to scale (e.g., building a strong 2nd line of management)
- Supported PIPE partners to embed managing by objectives through a set of annual and monthly dashboards and metrics which determine business health



1 –Based on data collected from partners I 2-Schools were physically shut due to COVID-19, and only remote learning products were offered by the partners to APSs during academic years 2020-21 and 2021-22 The PIPE team has been unable to verify children's extent of engagement with these remote learning products due to school closures and COVID travel restrictions

Goal

3 ABL solution providers >500 APSs each Improve quality: Children in PIPE APSs responding correctly to numeracy and literacy questions increased by 33%

Activities

• **Developed public goods** based on research with 4400 parents, 28 APS administrators, 40 teachers, 167 ABL solution providers to:

Goal

50% better

learning

skill

outcomes

across each

- Understand the reasons for poor learning outcomes
- Leverage motivations of stakeholders to improve quality
- Supported partners in adapting their product for the APSs market and in improving teacher training
- Developed 'STARS', a tool to assess education quality (including learning outcomes) in APS
- Annually assessed and published learning outcomes in PIPE APSs
- Supporting partners to develop remote learning strategies to ensure learning continues during the pandemic

Impact to date¹ 33% improvement Since 2018



1-Using the STARS tool. Sample sizes: 2018 (190 children in 38 PIPE APSs and 100 children in 20 control APSs), 2019 (636 children in 106 PIPE APSs and 168 children in 28 control APSs), 2020 (492 children in 116 PIPE APSs and 210 children in 35 control APSs), 2023 (378 children in 63 PIPE APSs and 204 children in 34 control APSs) I 2- Represent 4 questions that were assessed from 2018-2023 – a. Can you read the word 'PIN'? b. Can you identify the largest number from a group of numbers? c. Can you count and give 12 sticks out of 20? d. Can you name any 6 animals?.

Shape demand: Created and disseminated collateral to educate parents on the benefits of ABL



Activities

- Developed 'markers to test concepts' to shape parental demand
- Developed video and print collaterals to educate stakeholders on key skills that children should be learning by age

Goal

Pervasive

to 15% of

ABL in one

tier-1 city

demand leads

APSs adopting

- Developed 8 videos to educate parents about their child's current poor learning outcomes, and help them engage in simple activities with their children at home
- Supported partners in organizing 'learning exhibitions' for parents, to showcase child learning outcomes due to ABL
- Developed 'Toys in a box', an engaging set of 6-8 developmentally appropriate affordable toys that engage children on key developmental outcomes

Impact to date

Disseminated parent engagement videos to 100K+ parents



www.ratta-ya-samajh.com



1 – Per PIPE's estimates, Bangalore has ~3,000 APSs Calculated based on the data reported by partners in July every year | 2 – Schools were physically shut due to COVID-19, and only remote learning products were offered by the partners to APSs during academic years 2020-21 and 2021-22

APSs in Bangalore adopting ABL¹

Raise awareness: Shared the importance of early education and the APS market with ~180 organizations



Activities

- **21 publications** including ANYAS, IDELA Equity
- ~50 presentations at national and global conferences (e.g., Global Philanthropy Forum)
- Whitepapers highlighting program research (e.g. the PreschoolPromise)
- 9 best practices sharing sessions attended by ~20 organizations (e.g. MSDF investee's)
- **10+ Videos** highlighting sales process, parent engagement etc.
- ~180 annual 1-1 update calls with people from foundations, NGOs and other organizations working in the education space to share PIPE's approach

Impact to date

- - Companies have used PIPEs best practices and business model to better target the APS market



- **Godrej** developed a program to support ABL solution providers by providing grants to APSs to "trial" the solution
- AVPN set up 'Early Learning Collective' as they realized that ECE can have high impact



• Central Square Foundation added a vertical that focuses on ECE based on PIPE research



 Aga Khan Education Service, India using videos developed by PIPE to communicate benefits of ABL to teachers and parents

Goal

Share approach, best practices, tools, and aspirations of families with 100 organizations annually



REIMAGINING SOCIAL CHANGE

BOSTON GENEVA MUMBAI SAN FRANCISCO SEATTLE WASHINGTON, DC FSG.ORG