

# Understanding the Educational Landscape of Children with Autism in Bangladesh

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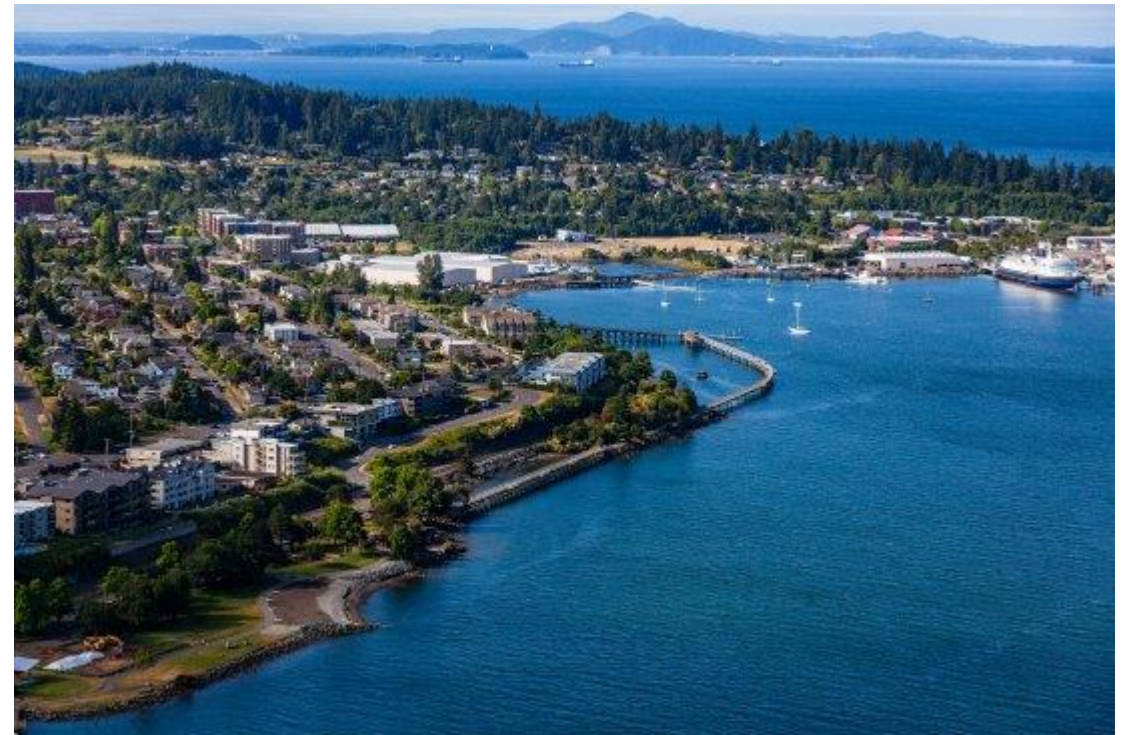
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# AUTISM: A GLOBAL VIEW



## FACTS & STATS

### WHAT IS AUTISM?



DEVELOPMENTAL DELAYS

DIFFICULTIES IN  
SOCIAL INTERACTION  
& COMMUNICATION

RESTRICTED AND  
REPETITIVE BEHAVIORS

### GLOBAL PREVALENCE

ON AVERAGE

**1 IN 160**  
CHILDREN



SOME DEGREE  
OF AUTISM

### AFFECTED BY AUTISM

ABOUT

**67** MILLION



PEOPLE WORLDWIDE

### CAUSES



GENETIC & OTHER  
FACTORS THAT  
INFLUENCE EARLY  
BRAIN DEVELOPMENT

Source: Facts are from the World Health Organization and Autism Speaks.  
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# Autism in Bangladesh



17 in 10,000 children autistic

**NEWAGE**

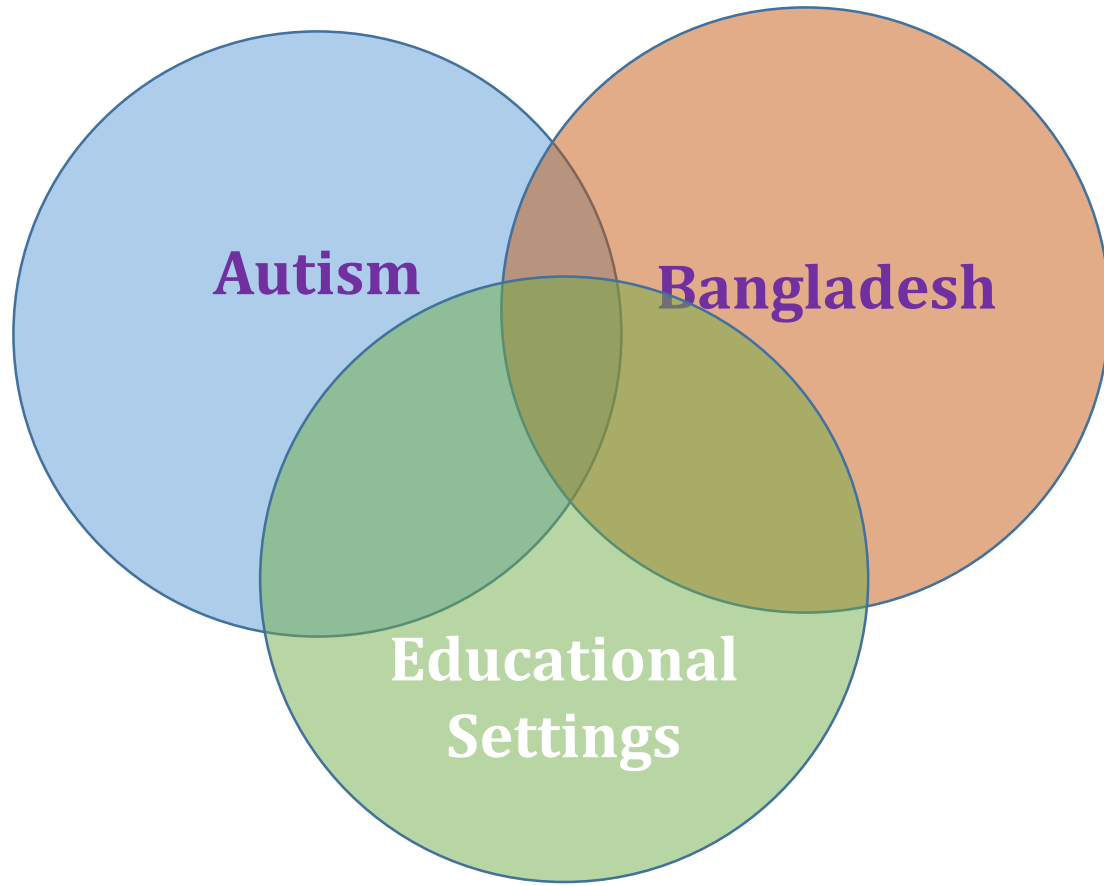


Govt working to bring autistic children in mainstream development



- Awareness
- Child development centers
- Academic materials
- More special schools

# Research Objectives

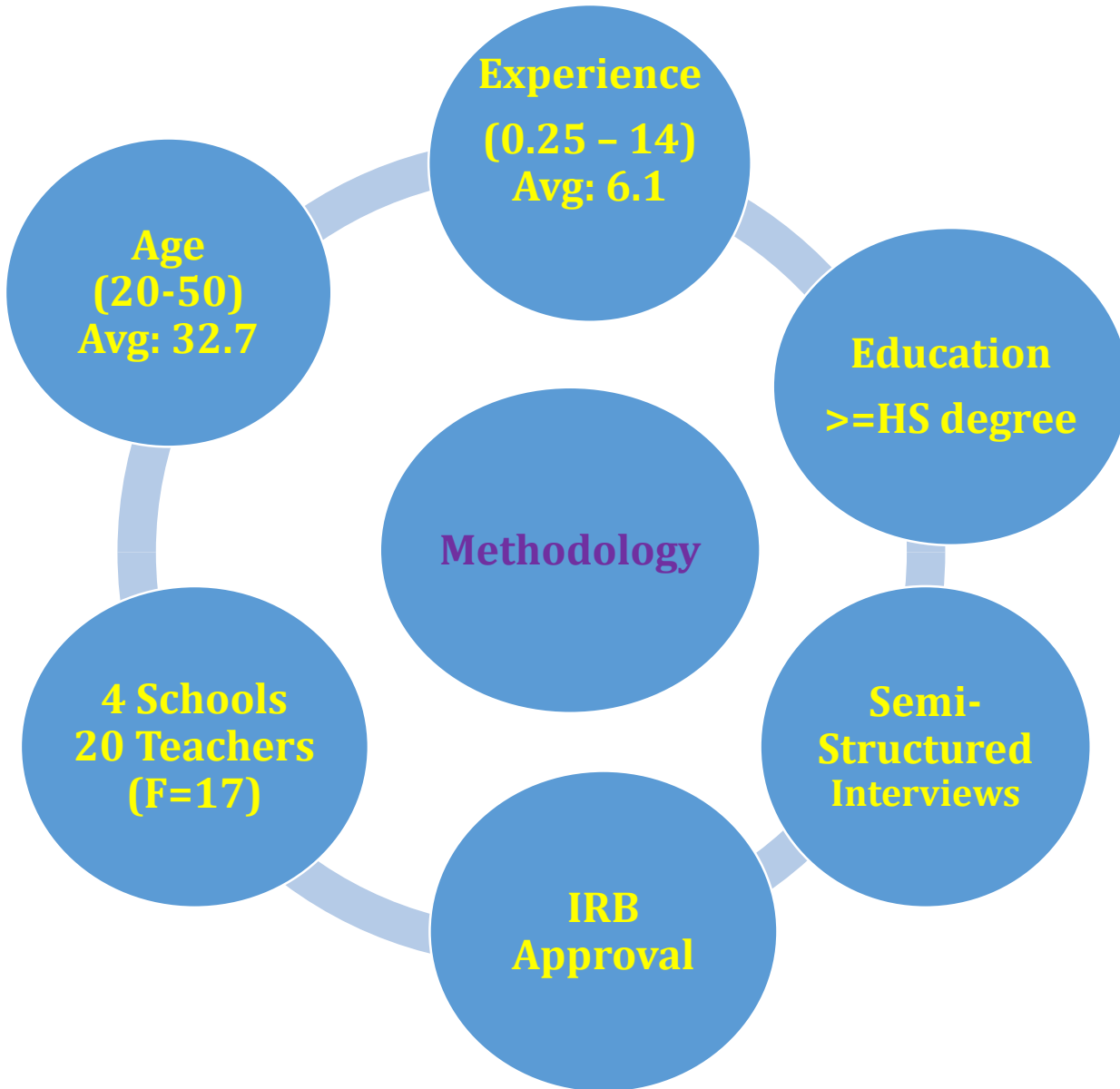


Primary:

*To understand current context of Autism in educational settings in Bangladesh through lenses of special school teachers*

Secondary:

*How ICT can support these teachers in their roles as educators*



- Semi Structured Interview

- Up to 66 min
- 29 questions
- Coding
  - Atlas.ti
  - 51 codes
  - High level themes

# Major Findings

# Teaching Journey

*Earlier I had no idea about autism. After joining here, I came to know about that. (P11, f, 11 years)*

**Start**

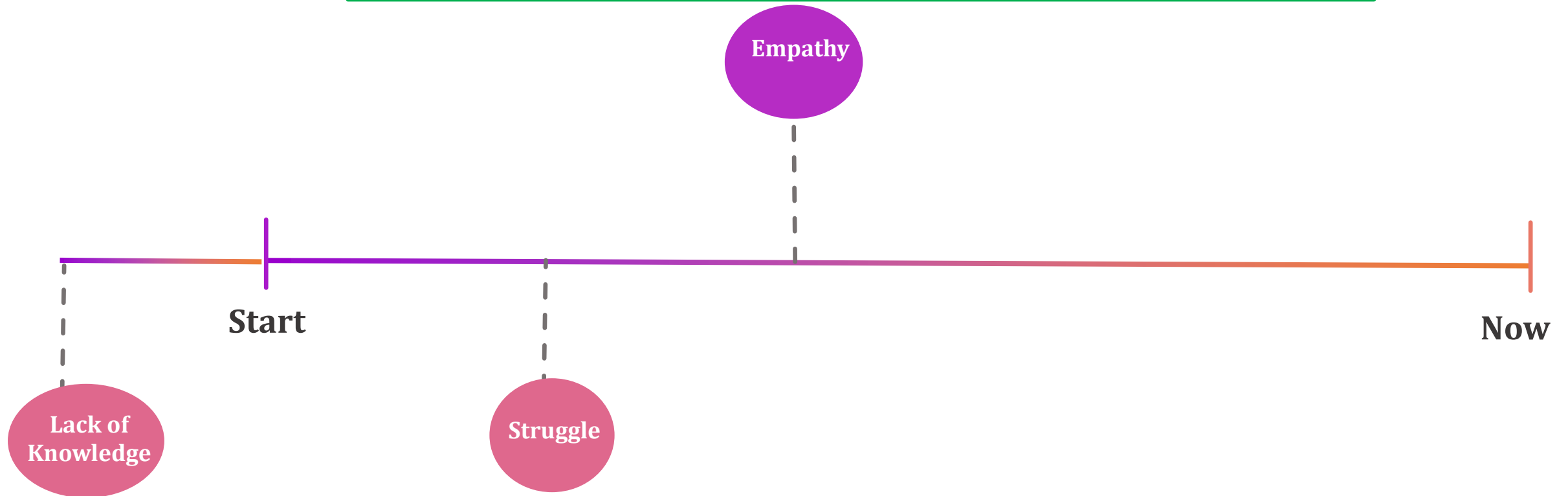
Lack of  
Knowledge

Struggle

**Now**

# Teaching Journey

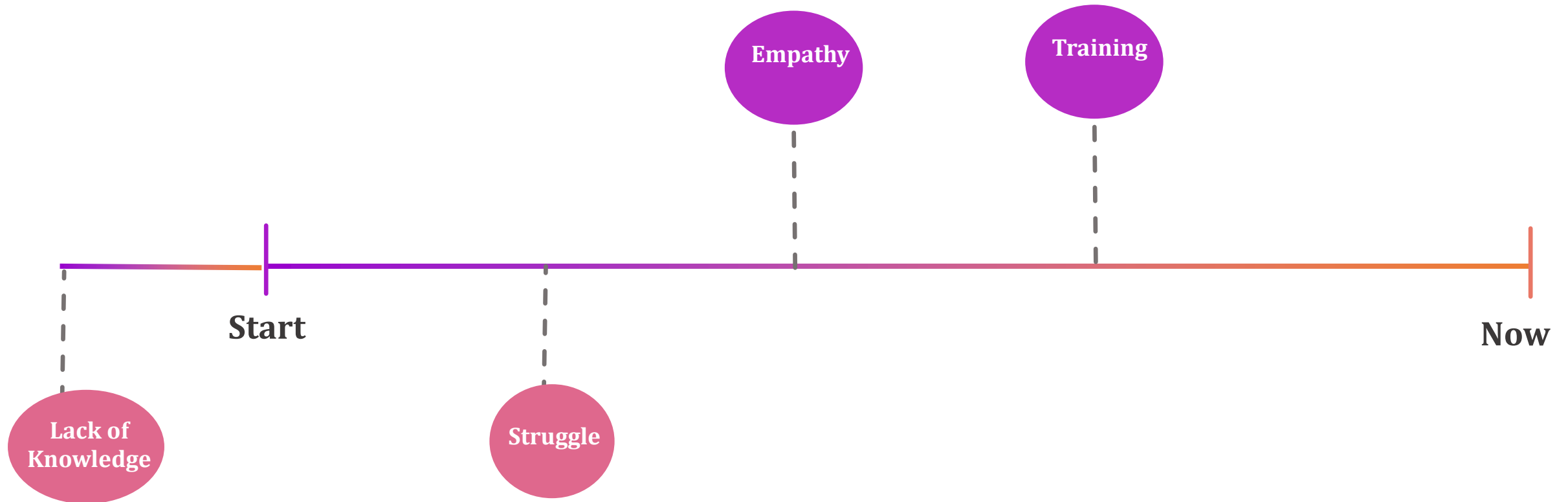
*I was emotionally devastated when I first joined here. I found that I must be very patient, hardworking, affectionate, and dedicated. I wanted to leave immediately. However, I completed seven years so far and over the years have learned a lot about these kids. I hope to learn more. It makes me happy. (P4, f, 6+ years)*





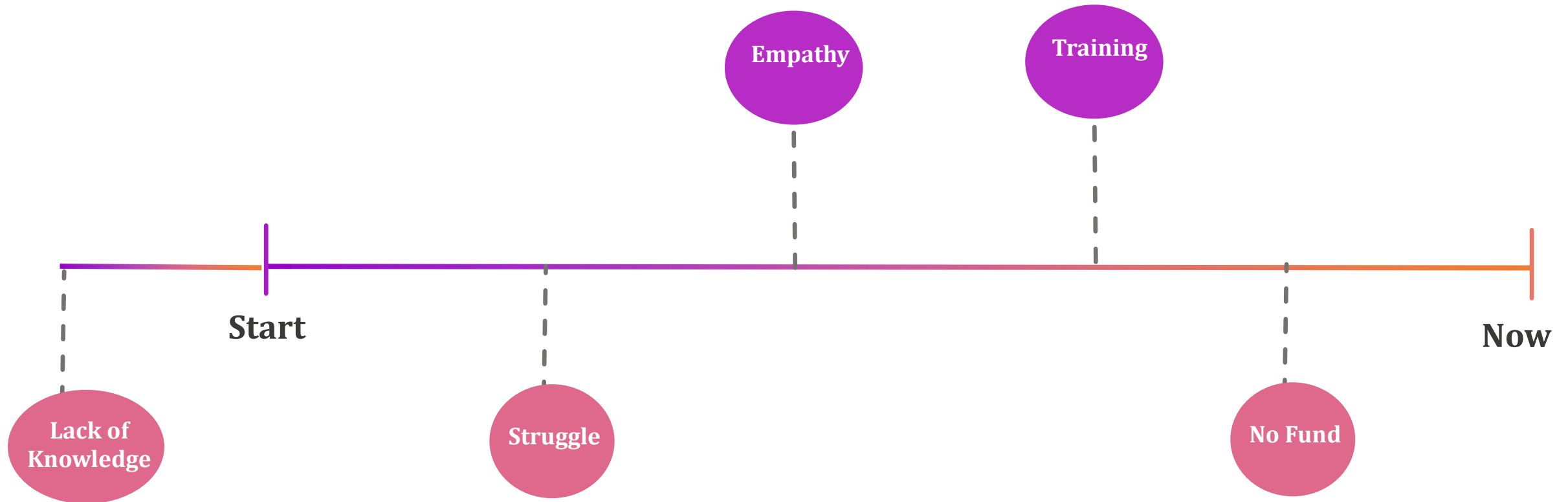
# Teaching Journey

*We were assigned under an experienced special teacher and we had to follow him/her to get a hold of everything that we needed to learn about the children. (P6, m, 4 months)*



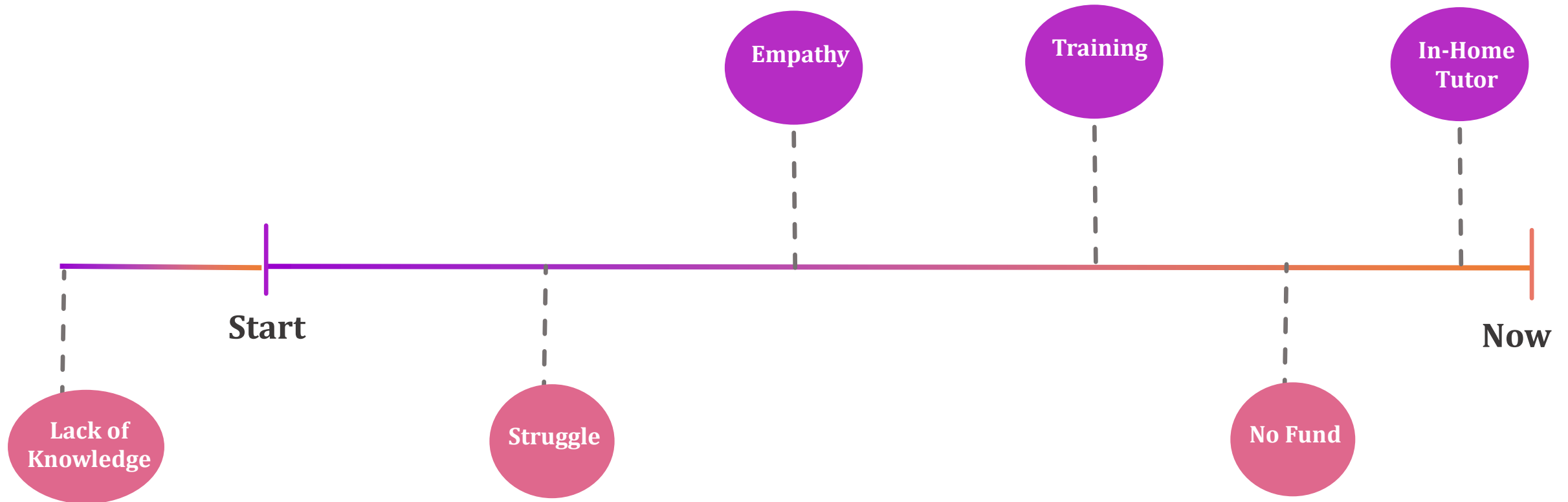
# Teaching Journey

*We can neither ensure any separate rooms to calm down those who get extremely restless nor afford to take the children out by a car for some time as the school has no transportation facilities. (P12, m, 12+ years)*  
*They [children with autism] should be given a field to play. Unfortunately, we do not have that yet. (P4, f, 6 years)*



# Teaching Journey

*Sometimes parents make a request to give time to their children if they are busy. What we do is teach them the same things at home. As a result, there is a synchronization between home and school and no time is wasted [to acclimatize with the child] since the same teacher is dealing with the child. (P1, f, 8 years)*





## Teachers vs. Parents: WHOSE JOB IS IT TO TEACH

*Parents do not provide as much effort as we do. Otherwise, there could be some good outcomes. Perhaps they have another neurotypical child. The effort behind that [neurotypical] child affects their concentration about the autistic child. (P1, f, 8 years)*

*We prepare a routine for the [autistic] children which they should follow both in school and at home. The parents do not understand that. As a result, even if we are moving the development process forward, the process is going backward because of them. (P4, f, 6 years)*

# Inclusive Classroom?



*Mainstream schools do not want to take them [as students]. (P6, m, 4 months)*

*Let them [autistic and neurotypical children] mingle and play together. They should interact no matter what. (P3, f, 4 years)*

*The [autistic] child must hold a minimum IQ, so that effort can be put to bring them into the mainstream. (P12, m, 12+ years)*



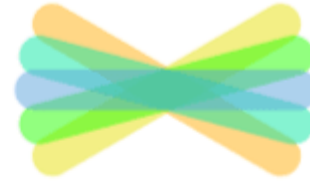
# ICT-based Design Implications

- In Bangladesh
  - Mobile phone users: 152.5 million
  - Internet subscribers: 88.7 million
- Teachers' interest to use ICT
- Students are highly capable

*They can operate everything on their own! Perhaps I myself won't be able to do that. (P12, m, 12+ years)*

# Synergistic Platform for Learning

*Seesaw*



## What is it?

A digital portfolio that captures learning, spurs reflection, and promotes engagement.

## Student driven

ELs can capture learning through recordings or photos.



## Share learning

Celebrate students' work with parents and families.



## Assess learning

Easily assess students' skill development and understanding of content.



## Teacher friendly

Designed to be a streamline, user-friendly teaching tool.



## Reflect on learning

Teachers, families, & students can reflect on the progress of learning over time.



[EmpoweringELLs.com](http://EmpoweringELLs.com)

# Visually Enhanced Educational Materials

- Culturally relevant, Interactive, Visually enhanced, Audio-capable, created in Bengali



# Context-Aware Interactive Digital Contents

- Capture real-life scenarios to explain how to apply new knowledge.

*Many [autistic] children go to hospitals or markets without realizing the purpose of going there. I suggest role-modeling technique to present the situation as a video so that the children can understand the situation and become mentally prepared before going there. (P18, f, 8 years)*



- How to use this money in different situations?
- Augmenting role-play scenarios with interactive digital content



# Things to Ponder

- Technology alone can't fix the problem
- Funding for Teachers and Schools
- Training
- More Inclusiveness
- Awareness in Society

# Take-Away Messages

- Current context of Autism Schools in Bangladesh
  - Teaching journey is not a straight path
  - Teachers and Parents are in a complicated relationship
  - Lack of Inclusiveness
- ICT can contribute
  - Synergistic Platform for Learning
  - Visually Enhanced Educational Materials
  - Context-Aware Interactive Digital Contents



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