

# Teaching with Text

## The Traditional Way



### Low Understanding

Text often leads to low understanding, which hinders parents' ability to advocate for their child's needs and potentially causes misinterpretation of recommended strategies.

(Banks et al., 2018; Critchfield et al., 2017)

### Low Acceptance

The use of technical language in behavior recommendations can lead to reduced acceptance of the recommendations, particularly among individuals with little or no training in ABA principles. In fact, researchers found that people rate ABA jargon as "not motivating" and "unpleasant."

(Banks et al., 2018; Critchfield et al., 2017)

### Low Engagement

Teaching through complex text can lead to low engagement because the team may struggle to follow behavior recommendations and resist change when the language is overly technical or hard to understand.

(Banks et al., 2018; Critchfield et al., 2017)

### Low Accessibility

Text is not always accessible to everyone, as language barriers, especially for families with limited English proficiency, can hinder understanding and communication during behavior intervention discussions, leading to reduced parental engagement, misunderstandings, and increased stress and anxiety related to their child's needs.

(Andrade, Hancock, & Whaley, 2019; Bradshaw & Richey, 2015; Hatcher et al., 2016; Taylor & Landrum, 2016)

### Low Confidence

Complex technical behavior recommendations can lead to low confidence as they often result in confusion, stress, and ineffective implementation, leaving stakeholders feeling unsupported and service providers ineffective.

In our own survey of people responsible for implementing behavior strategies, only 40% reported feeling confident and only 28% reported feeling prepared.

#### Feeling confident in using strategies

40%

#### Feeling prepared to support behaviors

28%

(Banks et al., 2018; Holt et al., 2016; Jarmolowicz et al., 2008; McMahon, Feldberg, & Ardoin, 2021)

### Low Collaboration

The use of technical language in behavior strategies often creates communication barriers, hindering effective collaboration between behavior specialists and stakeholders like parents and teachers.

In our own survey, only 25% of people responsible for implementing behavior strategies reported being aware of what strategies were being used in other settings.

(Peterson et al., 2018; Sailor & McCarthy, 2015)

### Difficult to Remember

Text is easy to forget because our brain quickly loses information, we often overlook the middle parts of long texts, and dense material can overwhelm us.

In our pilot study, we found the average number of strategies included in a BIP was 26. However, the average number of strategies a person responsible for implementing could recall was only 3.

(The Forgetting Curve, Serial Position Effect, Cognitive Load Theory)

### Low Accuracy

Research shows that typical teaching approaches result in low accuracy with team members implementing less than 60% of the recommended strategies, and those being done so with an average accuracy rate of only 68%.

Parents and teachers report struggling to understand and implement complex technical instructions effectively.

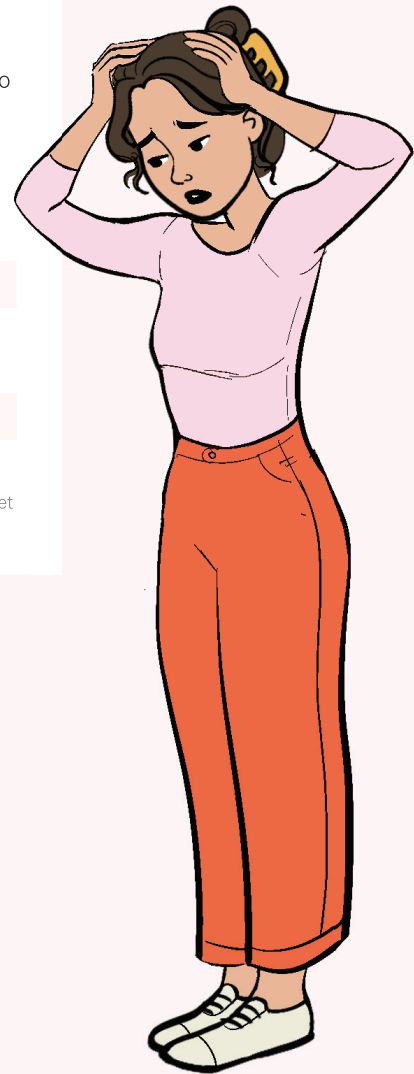
#### Strategies implemented

60%

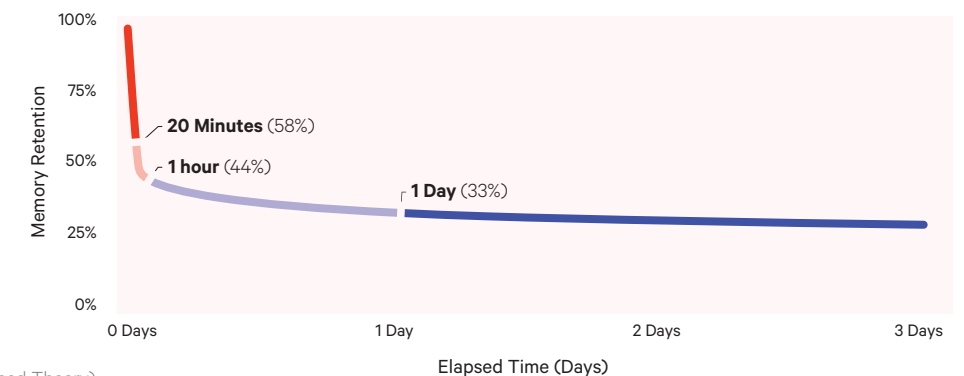
#### Accuracy of implemented strategies

68%

(de Bruin et al., 2014; Scheibel et al., 2022; Walker et al., 2021)



### The Forgetting Curve for Text



# Teaching with Images

## Our Innovative Approach



### Better Understanding

Visuals make things easier to understand and they help teachers and parents better grasp behavior management strategies, making learning and skill application more effective.

(Albers & Greer, 2010; Eberhard, K., 2021; Hughes & Frederick, 2006; Sung-Hee, K., 2022)

### More Preferred

Research has shown that most people overwhelmingly prefer instructions with visuals and find them easier to use than traditional written instructions, indicating a clear preference for visuals over text-based content.

(Graff & Karsten, 2012)

### More Engagement

Visuals improve engagement by capturing and holding the viewer's attention more effectively, as shown through eye-tracking studies. Visual storytelling makes the content more memorable, and viewers engage longer.

(Harsh et al., 2019; HubSpot, 2022; Paradi, D., 1986)

### More Accessible for Diverse Needs

Visuals offer greater accessibility, ensuring that those with diverse needs can access and understand the information.

(Abdulrahman, et al., 2020)

### Increased Confidence

Training with visual supports has been shown to boost confidence among parents and teachers in managing challenging behaviors.

(Clees & Brady, 2006)

### Better Collaboration

The use of visuals has been shown to enhance communication between service providers, parents and teachers, fostering more effective collaboration in behavior management.

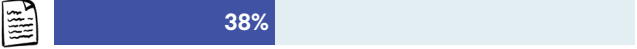
(Zarcone & Lindauer, 2006)



### Higher Accuracy

Visuals significantly improve accuracy in comprehension, recall, and implementation, as seen in studies where infographics led to better understanding, and instructions with diagrams resulted in a substantial increase in accuracy from 38% to 99%.

#### Remembering textual content



#### Remembering visual content



Additionally, visual supports have been shown to enhance the fidelity of implementing behavior strategies in both special education and general classroom settings.

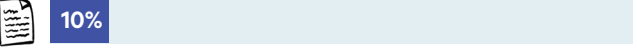
(Arco & Ricci, 2018; Graff & Karsten, 2012; Koegel & Koegel, 2006; Meyer & Bohning, 2011)

### Better Retention

Using visuals alongside words makes information easier to remember because it engages different parts of the brain, reduces mental effort, and helps people see and remember relationships and patterns, ultimately improving retention.

Research has shown that people tend to remember information with visuals significantly better than text alone (65% compared to 10%), which is widely understood as "the pictorial superiority effect."

#### Remembering textual content



#### Remembering visual content



In our own pilot study, accurate recall improved by 57% when behavior strategies were presented as visuals instead of text.

(Dual Coding Theory, The Picture Superiority Effect, Cognitive Load Theory)