

# Survey Results: Reflex's Role in Improving Student Motivation, Persistence, and Math Fact Fluency

## Executive Summary

*User feedback surveys conducted in May 2024 revealed high levels of satisfaction with Reflex. Nearly all teachers reported increased engagement, motivation, and a growth mindset in their students, and 100% of the teachers said that they would recommend Reflex to their colleagues. Gamification and progress monitoring were seen as crucial aspects of Reflex that contributed to students' success in achieving math fact fluency.*

ExploreLearning conducted an online survey of teachers who used Reflex during the 2023–2024 school year. A total of 55 elementary school teachers completed the survey, which included both rating scale and open-ended questions, on the following aspects of their experiences:

- Their goals for using Reflex in the classroom
- Areas of student improvement observed from using Reflex
- The features of Reflex that most supported student learning

## Using Reflex to Meet Student Learning Goals

Teachers were asked about their reasons for using Reflex in the classroom in an open-ended question. Their answers emphasized effectiveness in building math fluency, the enjoyment and engagement it provides to students, and their ability to monitor progress.

### Increased Fluency and Mastery

Teachers use the Reflex program to improve students' automaticity and fluency in math facts, which are foundational for higher-order math skills. Many of these teachers noted significant gains in a short period of time, even among students who were struggling in math.

- *"We want our students to have the automaticity with addition and subtraction so that they can use their brain power to solve higher order math problems with less struggle."*
- *"96% of my students were 100% fluent before the end of the school year thanks to Reflex."*

### Student Engagement, Motivation, and Enjoyment

Teachers appreciate that Reflex makes learning fun and engaging for students, which helps maintain their interest in practicing math facts.

- *"I want my students to learn fact fluency in a fun way!"*
- *"The games were engaging and getting the green light was motivating and rewarding"*

## Establishing and Monitoring Goals

Reflex provides a way for teachers to track student progress and see tangible results in math fact fluency.

- *"Great way to keep track of student math fact fluency. See great results and progress with students."*
- *"Students love it, and as the teacher, I love the data."*
- *"I have seen significant growth in student learning of math facts. I appreciate the reports that I have been able to access."*
- *"We used Reflex to help establish and reach school-wide goals."*

## Areas of Student Growth Observed by Teachers

Teachers overwhelmingly agreed that Reflex has met their expectations regarding student learning outcomes. They also agreed that Reflex was aligned with the student learning outcomes in their state standards (95%) and curriculum (98%).

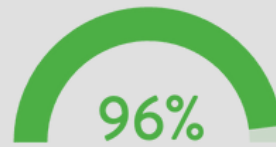
Nearly all (91%) of the teachers observed moderate to large fluency gains in their students. Teachers were also asked about other areas where they observed student growth because of using Reflex. Teachers provided overwhelmingly favorable ratings across several areas, including classroom engagement and student motivation. The graphs below provide a summary of the rates of agreement by teachers for various areas of positive student development from Reflex usage:



Agree that Reflex improves student engagement



Agree that Reflex improves student motivation



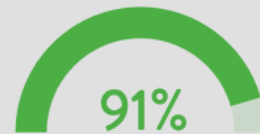
Agree that Reflex encourages a growth mindset



Agree that Reflex improves student confidence



Agree that Reflex fosters student persistence



Agree that Reflex maintains student attention

## Features of Reflex that support positive student outcomes

Teachers were asked about which features of Reflex were most helpful in supporting student success with the program. Teachers reported that the program was built upon an effective approach to learning math facts, that gamification was important for keeping students engaged, and that progress-tracking features were motivational for students.

### Engagement Through Gamification

Many teachers highlighted the gamification aspects of Reflex, noting that the games make learning fun and keep students motivated.

- *"They love the game aspect. They don't even realize they are learning."*
- *"The students love playing the games and trying to get high scores."*
- *"It is fun for the kids. The program does an awesome job using gamification to help kids learn their math facts."*

### Progress Tracking and Feedback

Teachers appreciate features that help them and their students track progress, such as the green light system, certificates, and detailed reports.

- *"The green light, student trackers, and fact family tree."*
- *"The aspect of reaching different milestones has helped especially my 1st and 2nd grade students. They loved receiving their certificates each week (sometimes daily)."*
- *"Seeing the individual 'trees' of facts. Seeing if and how long they were logged in and seeing the number of fluent facts each student had."*

### Repetition and Practice for Mastery

The repetitive practice of math facts until mastery, without moving on prematurely, was seen as an effective method for long-term retention.

- *"The repetition of facts students have not yet mastered helps to increase long-term memorization."*
- *"The making them do the same facts over and over to earn games."*
- *"The fact grid shows the facts that need more practice. The typing practice before giving the facts is also helpful for younger students still learning the keyboard."*

# 100%

Agree that Reflex is an easy tool for teachers to use

# 96%

Agree that Reflex is an easy tool for students to use

# 89%

Agree that Reflex was a timesaver

# 89%

Agree that Reflex helped them meet teaching goals

# 100%

would recommend Reflex to their colleagues

## STUDENT SUCCESS STORIES

**We asked teachers to share notable success stories they observed this year.**

*“96% of my students were 100% fluent before the end of the school year thanks to Reflex.”*

*“I had a very reluctant student who found Math concepts extremely difficult. A few months into the school year, I introduced Reflex, and this student began to love Math because of the gamified approach. The math made sense to them.”*

*“One student in my homeroom class was becoming very discouraged as her percentage remained the same. I was able to witness her working every day on Reflex, and she was so excited when she came to me one morning telling me that she was at 95%.”*

*“I have a student with several learning disabilities, but he was very confident in his math facts because of Reflex. He made it to 100% fluent well before the end of the school year.”*

*“A student who has had extreme difficulty in math and attentiveness to Reflex for the majority of the year finally clicked. All of a sudden, her Addition/Subtraction fluency reached 100%, and now she is flying through Multiplication/Division, which she is able to apply to her learning!”*

*“One student went from about 10% proficient in addition and subtraction to 100% fluent. Now, he is also very quickly improving his multiplication and division fluency, even though it is above his grade level.”*

*“All students loved to look at their trees and comment on their progress. This program impacted them all to feel more successful.”*

*“A student who is on an IEP struggled with learning her facts, but the Reflex program really motivated her, especially tracking her percentages. I had the kids graph their own progress. This really motivated her to continue doing her best!”*