

STRONG LEARNING

Purposeful Playful Practice

What is purposeful playful practice? It's **how learning happens**. Let's unpack that.

What happens when we learn?

The ultimate goal of learning—no matter what we're learning—is to facilitate changes in the brain. No matter what skill or concept we're focusing on, *until it's embedded in long-term memory*, and can be retrieved and built upon, it isn't learned. We acquire information when we are focused (attention) and through memory. Information, whether presented visually, auditorily, kinesthetically, through smell or taste, first enters short-term working memory if we're paying attention to the sensory input. But in short-term memory, when the subject or activity changes, the intensity of any experience lessens. So how do we transfer what we've learned from short-term memory into long-term memory? Through repetition and rehearsal. Through **practice**.

PRACTICE

"Practice makes perfect." Well, not perfect right off the bat, which is why repetition is essential for consistent improvement. We don't develop skills overnight when learning to read music or play an instrument. When learning to handle pencils and utensils, tie our shoes, and make our beds...becoming more proficient requires opportunities to practice. Reading well and fluently without having to stop and decode a word, instantly remembering times tables and using them in advancing math concepts, and organizing our thoughts in standardized sentence formats so we can communicate with others...all require practice.

But some of us, if not most, shudder when we hear the word "practice." We enjoy learning to play the piano, but those scales! Ugh! Too often, especially in an academic sense, when we hear the word practice, we think of drilling with flashcards, writing and rewriting the same words over and over (sometimes used as a punishment), and computer-driven activities about things we don't fully understand and aren't interested in learning.

It isn't easy to get children to practice independently, especially struggling children who haven't achieved a lot of success. And let's face it. Doing the same things repeatedly is boring—and developmentally, children can't conceive why whatever they're supposed to practice is important.

Yet practice is key. So, what can we do? Fortunately, there's an answer.

It's called **PLAY**.

PLAY

Countless research studies have shown that we learn anything faster when playing than at any other time, but it doesn't take a research study to understand this. It's common sense. You learn a new stitch in knitting, work on your tennis or pickleball swing, join a beginning bridge group, or go to a cooking class because you want to—you enjoy it. The first time you tried to cut an onion, you probably made a mess of it. Did it go across the net the first time you hit a tennis ball? Unless you were a prodigy, you aren't instantly great at anything and that's okay. Because we know that improving at a skill requires what? Repetition.

Why did you practice? Because, as an adult, you could see a future where you would knit better, play better, and win more often—all things that feel good. But think Piaget. Elementary school children are still in a preoperational or concrete stage of development. If a child knows the tune to a song, practicing playing that instead of scales is far more enjoyable.

Today—and *only* today—is what they know—except in highly unusual circumstances, their brains' ability to project them into a future when they'll be proficient at something is not yet there. Changes (growth) in a child's brain from birth to age five and beyond take place during play. What's cooking in that play kitchen isn't just imaginary food—it's setting a table, distinguishing between plates and bowls. Intuitive "knowledge" about physics that won't be expressed verbally for years is still being acquired when a bat is swung at a ball on a tee,

or we turn the wheel of a toy car. And at five or six, we don't know that we're learning to read when we connect an admittedly odd group of symbols like the letters "b-a-t" to that stick we use to hit at a ball—much less what reading will allow us to do in the future. And yet we learn to read just the same.

At least three things are at work that makes learning easier when we're having fun:

- 1) We're not anxious—which blows up our ability to focus. We're absorbed in what we're doing, *engaged* because we're trying to win a game.
- 2) Much of the learning that happens during play—is cognitively passive. When teaching young children, their focus isn't—can't be—on the process of learning itself. (What does learning mean?) Their attention is on doing what comes naturally to them—having fun. And when they are having fun, they want to do it over and over. Isn't that what we want to happen?

Then one day, they're aware that they can do something they couldn't do before. As Mario, a boy in a summer reading program involving stories, plays, and games that we offered to struggling children once said, "I don't know exactly how it happened, but now I can read."

PURPOSE

When the goal is to facilitate practice, play with no objective other than play itself is ineffective *if the goal is an academic one*. The information to be memorized or the application of a skill must be an integral part of the game. Playing at recess, for example, is important in terms of physical exercise and giving children a chance to reboot. But if the goal is to help with decoding skills, then decoding must be part of the game. If the goal is to help with the memorization of multiplication tables, then winning the game must require giving correct answers to multiplication problems. If the goal is to learn basic science terms, the game must require that those terms are involved in the game itself.

Make instruction fun, make it purposeful (even if you're the only one who knows), and the practice is a happy side effect. We all like to compete and win at games, whether playing by ourselves or playing on teams. And the more we play, the better we get, and the more we learn. It doesn't matter *how* we practice—just that we do. It doesn't matter *how* we help students move information from short-term to long-term memory—just that we do.

It doesn't matter how we learn or how long it takes—just that we do.

Strong Learning

Over forty years ago, when we started our tutoring practice, I learned as much as I could about then-current theories about how to effectively work with students of all ages. I tried this program and that, some of which helped with some students but not with others. Over the years, having raised two children of my own—one of which was diagnosed as ADHD—I realized that the emotional impact on the self-esteem of children who struggle in school for whatever reasons—and there are many—often outweighed any neuro-divergent symptoms when it came to remediation. Beginning at about the same time they are formally learning to read, identities are also beginning to form. We start by comparing ourselves to others—I'm smart, I'm dumb, I'm tall, I'm short... We see the pride—and disappointment—of our parents at our school success or lack of it. During childhood, before we've developed healthy social and emotional skills, the only defense we have against the anxiety and frustration we feel when we struggle in school is to refuse to try, which only makes things worse. And then, too often, we're punished for bad grades, but when forced to choose between punishment and the inherent humiliation of thinking something is wrong with us or that we're not as smart as other kids in our classes, punishment is preferable. It doesn't hurt as much.

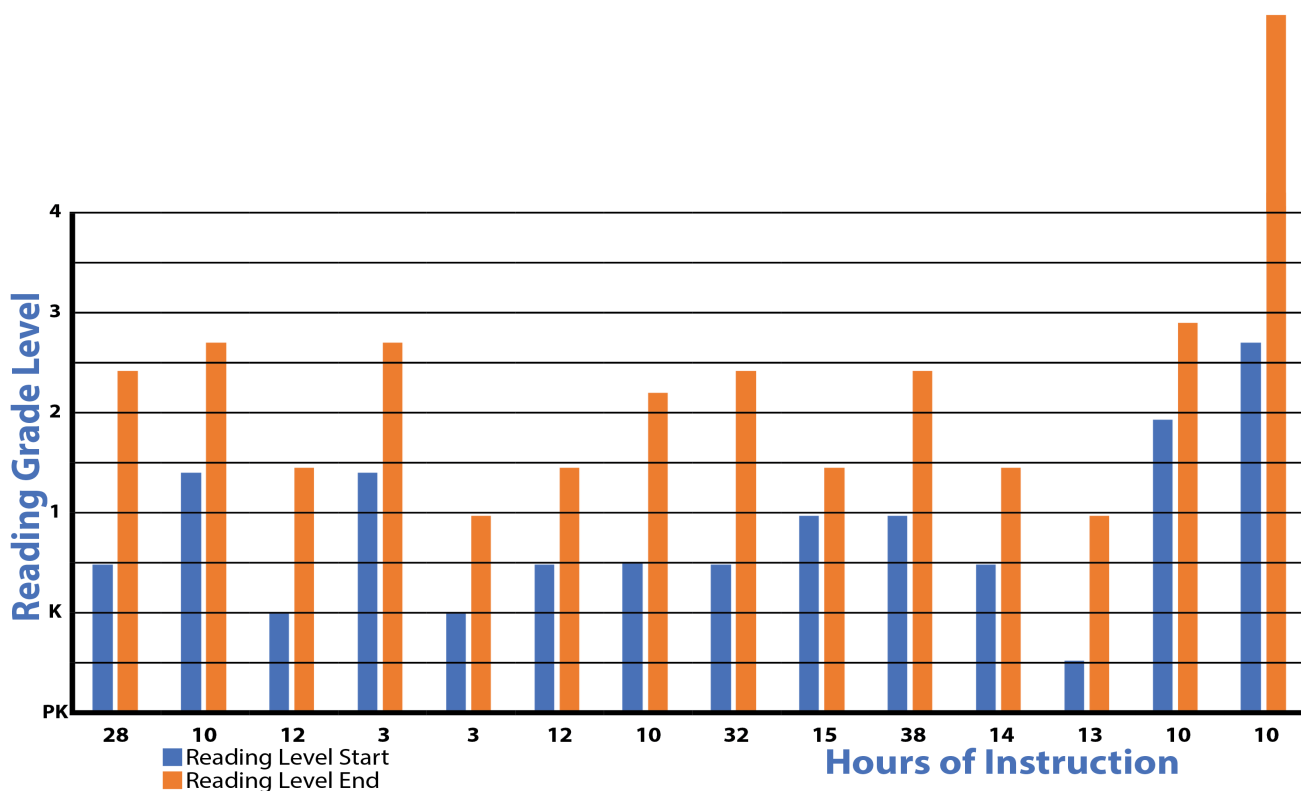
Over and over, especially when I encountered children who refused to sit down with me if the dirty word "reading" was mentioned, I said, "Okay. Want to play a game?" Understanding the importance of play in child development, I used index cards and started making up games to play with the children who came to our

offices—card games, lotto games, paper chains, you name it. It took no time at all for me to see that children who are relaxed, having fun, playing games, are far better able to focus and pay attention...and that the more we played, the more they learned. I created a simple assessment to determine what foundational English reading skills a child had when he or she first came to see me—and after a while, I gave it again.

It's not rocket science. And it works today as well, if not better than it did 40 years ago. But don't take our word for it. Take a look at the chart below.

This chart depicts the starting and ending grade levels of students who played Strong Learning SuperDeck card games. These students were randomly selected and came to us through neurologists, ophthalmologists, school counselors, or concerned parents. All were failing in school due to difficulties with learning to read. Some had IEPs. All had performed below grade level on their most recent standardized or school tests or results from our administration of the GORT.

After a number of hours of gameplay, every student improved in post-testing based on assessment with the GORT or SLRI.



We and our tutors use the Strong Learning Reading Inventory (SLRI) in-house to assess the reading grade level of students. The inventory assesses each student's knowledge of foundational concepts and phonetic awareness, beginning with the ability to identify words that rhyme, recognize upper and lower alphabet characters, produce beginning sounds associated with each consonant and short and long sounds for the five major vowels and has been calibrated against state performance standards. The inventory helps us determine the best phonics card decks to begin with.

The SLRI assessment is available as a FREE download on our website <https://stronglearning.com/game-directions-assessment-tools/>. Call us to learn more or participate in our study 888-3-STRONG.