

How is learning a dance like learning math? It's all in your head.

Learning About Learning

Your brain is hard at work, getting important things done, even when you're not thinking about it. It's keeping your body temperature steady, it's releasing chemicals and sending out electrical signals that keep your organs working properly—it's even making sure you're breathing.

Your brain knows how to do these things and many more, right from birth. You don't have to learn how to blink, breathe or swallow.

Other things require learning. Things like speaking, walking, tying a shoe, and riding a bicycle. Now that you can do these things, they probably seem easy. You may not even remember how incredibly hard they were to learn when you were younger.

Just watch a baby take its first steps, and see all the concentration it takes to stay on two feet. If there's any distraction—a bouncing ball or a loud sound, for instance—down goes baby. Tying a shoe is just as hard. But now, you can probably tie your shoes thinking about something completely different. It has become automatic.

Teaching Your Muscles

When athletes, dancers or musicians perform, they get their muscles to do incredibly complicated things, like hitting a baseball, sinking a basket, performing a dance, or playing a song. And it all happens so quickly and smoothly it's almost like magic.

The reason is that the brain can store complex sets of instructions for your muscles and then play them back when you need them. If you practice even the most complicated thing long enough, it can become as easy as tying your shoe.



Activity Instructions



Before You Start

Think about three different things you've learned recently, and list them here:

1. _____
2. _____
3. _____

Do any of the things on your list involve the body as well as the mind? Does your body learn in the same way that your mind does?

In Stomp High-Low, you'll teach your body some brand-new tricks.

What You'll Need

- A stopwatch
- A team of at least five kids

Getting Ready

Warm up your muscles with your teacher or other adult group leader

How to Play

1. Form a line with each kid about two feet from the next one.
2. The kid on one end begins the Stomp High-Low by stomping his or her foot, and giving the next kid in line a "high ten" (just like a "high five" but with both hands).
3. That kid gives the next kid in line a "low ten," (with both hands as low as possible) and that kid gives the next kid a "high ten," and so on, all the way down the line. (These kids don't do any stomping!)
4. When the last kid in line gets the hand-clap, he or she stomps a foot and gives a high-ten right back to the same kid.
5. This continues all the way back down the line until the very first kid receives the hand clap and gives a final Stomp.

Have someone time you with the stopwatch. Begin timing with the first Stomp, and end with the last Stomp.

Keep practicing Stomp High-Low and time each try with the stopwatch.

See how fast you can do it without making any mistakes!



Stomp!



Up high!



Down low!

What did you learn?

The first time your team tried Stomp High-Low, how did it look?

How did it feel to you, as a player?

How many tries did it take before you could do it perfectly?

Would it get better if you practiced it every day for a week?

Did Stomp High-Low start to become automatic the more you did it?