



Education



Julia Steiny: Children can learn valuable lessons from time spent at play

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Here's a fun factoid: All mammals play-fight. Puppies, kittens, kids, all of them. But why? Evolution must have had something in mind. What's all that growling, wrestling, chasing, hissing, pushing and pouncing for?

The folks at Roger Williams Park Zoo kindly introduced me to their wildlife biologist, Tim French, deputy director of the zoo. To answer my question, we hung out with some primates, of course, who are smart and masters of fooling around. While to my eye gibbons look like monkeys, they are small, endangered apes. Today, the gibbons' Dad is off by himself, but Mom hangs out by the big picture window, staring at us intensely with a look that French interprets as "Do you have food?"

However quiet the parents, their baby Mason is busy playing with the crowd of kids pressed against the glass. Both kids and the little ape duck out of sight and pop back up again in a game of peekaboo. When a kid flattens his hand on the glass, Mason mirrors the gesture with her hand. Which makes the kids squeal. French says that Mason's favorite game is to back up, take a running start and hit the glass hard to make the kids scream. Which they always do. Here, mammals are play-fighting across species. Loads of fun.

As it turns out, play-fighting is not unique to mammals. Many species use play for family bonding and to teach about the world.

But, French says, "the higher the life form, the more the brain must be exercised. With primates, so much is about learning the meaning of postures and facial expressions. Fear, anger, states of arousal each send completely different messages. So these guys need social skills. Who's to be played with, followed, imitated? Who should you keep away from? Mammal primates (including human kids) who don't develop these social skills become outcasts. And that threatens their survival."

Ah, playing is a survival strategy. It fast-tracks learning by putting the young in a constant problem-solving mode. Much like sex for adults, the fun inherent in play lures creatures into doing what evolution needs them to do. So play teaches kittens, puppies and kids what they're capable of, how to keep the other guy off guard, how to stay alert and improvise responses to an opponents' behavior. Play-fighting teaches about limits, what hurts, how to stay in control and when to hold back.

French says, “The more social an animal, the more important play is to survival and adaptation. Social skills are subtle, harder to learn than other adaptations, and there’s more to learn.”

So the value of play can’t be overstated. “Many researchers have studied sensory load and deprivation. The brain simply doesn’t develop as much in circumstances of deprivation. Zoos used to be concerned that animals be surrounded with the right environment, but now we’re concerned that they have enough to do. We routinely put new objects in there because play develops their physical skills, and because it makes them more active and lively. Even a big, yellow-plastic fishy rocker suspended on a rope is okay, as long as it works for gibbons.”

Which explains why the apes’ space has some very out-of-place, daycare-type toys.

But the most exciting toy in the world is another creature.

Standing, watching the elephants get a bath, French notes, “Elephants play to learn how to dig, to know what’s acceptable, what’s appropriate.” The baby elephant pokes and messes with Mom, who tolerates it up to a point. When he crosses the line, she might give him a thwack with her trunk, or more often a look or a posture that says, “Lay off.”

French explains, “Elephants must interact with each other because they’re herd animals. The dominant female knows where the water is during the dry season. They need to know whom to follow, how to cooperate, how to work together to get food. A lot of this is learned through play.”

French tells the story of a herd of endangered African elephants who were confined to an area without enough food. Scientists relocated some of the young to a new area hoping they could thrive there. They did, but the scientists were suddenly finding dead rhinoceroses. They discovered that the young males had become bullies and were killing other animals for the fun of it. French says, “They’d grown up in the absence of a bull elephant who would teach them appropriate behavior.” Playing with adults is essential, or killing can become fun.

To me the educational implications of the power of play are huge. It seems we’ve begun to associate play and fun with the empty-calorie amusements of electronics and passive entertainment like TV. But the brain is hard-wired to get tons of pleasure from learning how to solve problems. Increasingly, teachers are injecting more fun and exploration into project-based lessons. But most schools aren’t set up to feed kids’ own interests — at least some of the time — so the kids can have strong, firsthand experiences of the joy of learning. Then schools waste a lot of resources on the deadly business of specially educating “at risk” kids whose behavior is screaming “I don’t like being here.”

When fun is absent from school, learning is depressed. Play has the power to boost academic achievement AND attract kids to school. If we’re so keen on measuring school quality, we should find a measure for play and admit that tedium and joylessness sabotage achievement.

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