Experts say schools are doing their students a disservice by cutting physical activities

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As kindergartner Kelly Garman rolls a yellow soccer ball on the floor between her outstretched hands, it slips out of her grasp and bumps into the radiator.

“The ball keeps escaping from me,” she tells physical education teacher Michael Sholansky, exasperation in her tiny voice.

Sholansky gently rests his hand atop the kneeling girl’s head, reminding her to keep her neck and head still as she tracks the ball with just her eyes.

This kind of targeted physical activity, explains Sholansky, can improve peripheral vision and help better prepare Garman and her Denver Elementary School classmates for reading.

It’s one component of Action Based Learning, a curriculum developed to help students in kindergarten through second grade train their brains and bodies to work together.

Denver Elementary School has featured the program since the early 2000s, and three years ago dedicated classroom space for equipment like tumbling mats, monkey bars and agility ladders.

“The whole process is tied to certain developmental milestones,” says Sholansky, in his 19th year of teaching. “Think of the brain as a washboard at the beginning. It has all of these holes. But when they learn new skills, it builds up. Nothing can fall out. We’re making the brain ready for learning.”

A growing body of evidence shows movement benefits students physically and academically. Be it big and heart-pumping or small and detailed, physical activity drives early childhood development and creates building blocks for later-developing academic skills.

Yet educators report that today’s kindergartners are arriving with less dexterity, less body awareness and more deficits than their peers of 10 to 20 years ago. And time allotted for physical education and recess continues to decline nationally.

“Play and getting out there and just manipulating things, it doesn’t seem to be happening as much anymore,” says Barbara Freiberg, handwork teacher at the Susquehanna Waldorf School in Marietta. “We’re leaping past that, and it’s not serving our children.”

Research shows that working on coordination, increasing blood flow to the brain and improving fine motor skills can lead to improved reading and writing, sustained concentration and memory gains.

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Studies also have shown that the parts of the brain associated with memory and learning (the hippocampus) and the way we move our body during a task (the cerebellum and ganglia) are larger in people and animals that get regular exercise.

Shaun Cook, assistant professor of psychology at Millersville University, says the limited studies published on school-age physical activity interventions show promise.

“It’s hard to ignore,” says Cook, director of the university’s Neuropsychology of Memory & Aging Lab. “These things are popping up all over the place.”

MOTOR SKILLS

Earlier this fall, LNP visited with teachers at Denver Elementary who had instituted an art program to help kindergartners overcome fine motor skill deficits.

The topic struck a nerve with educators and occupational therapists, who say they are seeing more children starting school with an underdeveloped grip and coordination problems.

A fine motor skill isn’t as simple as squeezing the hand or shaping the fingers.

“You’re asking for vision, coordinating the eyes,” explains Bernie Hershey, an occupational therapist with Schreiber Pediatric Rehab Center. “You’re asking for muscle development. You’re asking for central processing in the brain.”

A weakness in any one area can make certain tasks frustrating or even impossible.

“We’re asking kids to do a lot more academically today at a young age,” says Devany LeDrew, a former kindergarten teacher who shared the initial LNP story with readers of her blog, Still Playing School. “There are ways we can make it more developmentally appropriate. Let’s have them moving, have them playing. There’s a happy medium we can find if we share ideas.”

Last year, LeDrew co-authored “99 Fine Motor Ideas,” a compilation of activities for the pre-school set.

BEFORE SCHOOL

Motor development begins long before school.

Babies and toddlers improve their pinching skills when they pick up tiny morsels of food or fuzz they find on the floor. Hershey says they should be allowed to play with small toys while being monitored.

She also encourages supervised tummy time for even the youngest babies, who strengthen arches in their hands when they push up. That leads to crawling, developing bilateral motion patterns used later for getting dressed, self-feeding, writing across a page and throwing a ball.

Pediatricians look for children to start reaching across their bodies &tstr; a term educators refer to as crossing the midline &tstr; as early as 6 months old.

Sholansky, though, still sees students struggle with the concept at 5 or 6 years.

In the Action Based Learning lab, kids who might never have crawled get extra time to build upper body muscles critical to writing posture. They’ll progress to skipping, another bilateral movement that indicates readiness for reading.

BETTER BEHAVIOR

For years, statistics have linked physical activity with improved academic achievement, better behavior and fewer high-risk behaviors.

But between 2006 and 2014, the percentage of schools requiring physical education for specific grades fell

to 52.1 percent. Just 26 percent now regularly schedule recess after lunch, according to the Centers for Disease Control and Prevention.

Fran Cleland is a kinesiology professor at West Chester University and former board member of Shape America, an advocacy organization that promotes physical education and research into physical activity, dance and sports.

Cleland says several case studies show that test scores improve with high-quality, standards-based physical activity. She and other experts point to the work of Dr. John Ratey, a Harvard researcher who studied the effect of the “Zero Hour” program in Naperville, Illinois.

Initially, struggling students did a cardiovascular workout before school started each day. After a semester, they demonstrated a 17 percent improvement in reading comprehension, versus a 10.7 percent improvement among other students.

In the late 1990s, Naperville’s eighth-graders bested the world in science, using an international benchmark. In math, they placed sixth behind leading Asian nations.

Administrators at the high school curriculum turned it into a first-period literacy class, and guidance counselors there urged all students to take gym just prior to their hardest subject.

PHYSICAL EDUCATION

“Physical education doesn’t take away from academic achievement. It enhances it,” Cleland says. “Principals have their priorities in different places. They may not be aware of the research, but it also comes down to facilities and staff positions.”

Even in a school where administrators back his efforts, Sholansky believes he could do more to promote brain-body connections. He sees his kindergartners for 30 minutes once every four days, and must alternate Action Based Learning with more cardio-centric lessons.

In some schools &tstr; including two in the School District of Lancaster &tstr;teachers have found the program so beneficial that students do it daily.

So why hasn’t their been a stronger push to embrace such programming in every school?

Cynthia Freeman, health, physical education and wellness network leader for the School District of Lancaster, says efforts are thwarted by “a belief that more seat time will improve learning and increase test scores.”

The focus has been on college and career preparedness.

At the Waldorf School, there’s a sense that movement is preparation for the future.

PREPARATION FOR THE FUTURE

Knitting, for instance, requires students to count or multiply while training their hands and eyes to work together. Finger play &tstr; like “Where is Thumbkin?” &tstr; promotes early literacy, while kneading dough strengthens hands and helps kids understand nutrition and science.

In years gone by, children might have practiced these skills at home with a parent or grandparent.

“There’s not always someone to emulate anymore,” says Freiberg. “We’re anxious to get the blood moving, to awaken them. We want them to clap their hands to awaken those neurological connections.”

Exercise does in fact build neural connections and gray matter, which makes thought processing smoother, according to Cook.

In a typical classroom, short bursts of activity like yoga stretches, five-minute dance breaks or sitting on a balance ball can engage muscles and give the brain time to reset.

Though the number of schools offering after-school intramural sports has doubled, Dr. W. Michael Haught of Roseville Pediatrics cautions about overemphasizing structured sports too early. Recreational play remains a better bet for young children.

LeDrew homeschools her 6-year-old daughter and builds time into each day for hand-related tasks that encourage her love for writing. She also allows time for running and playing.

Those pursuits might be even more important for young boys, who are three times as likely to be diagnosed with attention deficit hyperactivity disorder.

“Our kids with attention and focus problems do much better if they have, interspersed through their days, sensory breaks or activity breaks,” Haught says.