

The Role of Movement in the Daily Curriculum

Sligo Creek PTA Recess & Wellness
Committee

November 8, 2018

REGULATION

MONTGOMERY COUNTY PUBLIC SCHOOLS

Related Entries:

CNA-RA, CNA-RB, CND-RA, EEA-RA, IGP-RA, ISB-RA, JPG,
JPD-RA, JPD-RB

Responsible Offices:

Chief Operating Officer
Chief Academic Officer
Deputy Superintendent of School Support and Improvement

Wellness: Physical and Nutritional Health

“Each school must establish a wellness council/wellness team to contribute to the integration of wellness measures as an element of social-emotional well-being in school improvement plans.

- School wellness councils/wellness teams are coordinated through the principal/designee.
- Information about this regulation and Board Policy JPG, *Wellness: Physical and Nutritional Health*, will be distributed to school wellness councils/wellness teams.
- Appropriate OSSl associate superintendents are responsible for oversight of school improvement plans and school-level wellness councils/teams.”

Importance of Physical Activity: MCPS Wellness Regulations

Physical Activity

Physical activity will be strongly encouraged for students, staff, and community members before, during, and after the instructional day.

- [Kinesthetic learning](#) approaches or tasks, and movement activities will be integrated into all content areas as appropriate.
- Physical activity during the instructional day is strongly encouraged.
- MCPS elementary, middle, and high schools are encouraged to offer opportunities for all students to participate in physical activity before and/or after the instructional day by providing physical activity programs, such as physical activity clubs, intramural programs, corollary sports, and/or interscholastic sports programs.

Role of Movement & Exercise in Emotional Self-Regulation

- *Small bouts of moderate aerobic exercise can have a positive impact on individuals experiencing emotion regulation difficulties.*

SOURCE: Bernstein, Emily & McNally, Richard J. (2016). "[Acute aerobic exercise helps overcome emotion regulation deficits.](#)" *Cognition & Emotion*. 31 (4).

- *Exercise is effective in regulating anger and anxiousness after a stressful event.*

SOURCE: Edwards, M.K.; Rhodes, R.E. & Loprinzi, P.D. (2017). "[A Randomized Control Intervention Investigating the Effects of Acute Exercise on Emotional Regulation.](#)" *American Journal of Health Behavior*. 41 (5): 534-543.

- *Exercise can be used to downregulate the physiological and experiential effects of negative emotions.*

SOURCE: Gross, J. J. & Thompson, R. A. (2007). "[Emotion regulation: Conceptual foundations.](#)" In J. J. Gross (Ed.), *Handbook of Emotion Regulation* (pp. 3-24). New York: Guilford Press.

- *Regular physical activity has also been shown to reduce emotional distress and improve emotional control.*

SOURCE: Oaten, Megan; Cheng, Ken (2006). "[Longitudinal gains in self-regulation from regular physical exercise.](#)" *British Journal of Health Psychology*. 11 (4): 717-733.

SEE ALSO:

"[Exercises for Emotional Regulation](#)" from the Crisis & Trauma Resource Institute

Historic! Recess Policies Introduced 2017-2018 School Year

“Recess may be withheld, at the discretion of the principal/designee, *only when students’ safety is a concern* (e.g., equipment or facility repairs, or severe weather) *and/or a child is at risk of harm to self or others.*”

<http://www.montgomeryschoolsmd.org/departments/policy/pdf/jpgra.pdf>

*Alternative disciplinary measures?

Challenges That Impact Movement

- Diverse geographical range of our student population means that walking or biking to school is simply not an option for some families;
- Safety challenges within nearby neighborhoods (i.e., lack of sidewalks plus aggressive drivers) make walking a risky proposition for some residents, who sometimes drive their children to school;
- School access restrictions, combined with public safety concerns, discourage children from being playing on the recess field to burn off energy *before school*, as schoolchildren used to do in decades past;
- Lack of dedicated gymnasiums in elementary schools across the county, as our gym also functions as an auditorium for assemblies and school functions;
- Route from lunchroom to recess field *through parking lot* is longer than more direct path through the building – requires stricter behavior standards from students due to public safety, thus increasing travel time to play field.
- Fewer opportunities for neighborhood-based play [kickball, baseball, jump rope, hopscotch, tag, Kick the Can, Capture the Flag, Four Square, basketball, and soccer] - compared to past decades - where children would learn basic physical skills of throwing, catching, running, jumping, kicking, and swinging a bat.

Physical Fitness in the United States: A National Health Crisis

“The U.S. Army faces an imminent and menacing threat to our national security: The lack of fully qualified young people to serve in the military. Faced with these declining numbers, we have two choices: Lower the military admission standards or raise the health and education standards.”

GENERAL (RET.) WILLIAM WALLACE, FORMER COMMANDING GENERAL,
US ARMY TRAINING AND DOCTRINE COMMAND

[Council for a Strong America](#)

American Heart Association concurs: “Obesity and physical inactivity aren’t just health issues for the country. They’re a threat for national security”

Study: [Unfit US Army recruits may pose threat to military readiness](#)

Bethesda Magazine [piece from Feb. 8, 2018](#) points out that MCPS ranks near the bottom statewide in terms of minutes per week of physical education at the elementary level.

**Minimum and Maximum Minutes per Week in Physical Education
in Public Elementary Schools
As of January 2018**

<u>School System</u>	<u>Minimum</u>	<u>Maximum</u>
Allegany	45	45
Anne Arundel	60	90
Baltimore City	45	100
Baltimore	50	100
Calvert	90	90
Caroline	45	90
Carroll	90	90
Cecil	45	45
Charles	80	120
Dorchester	50	105
Frederick	80	90
Garrett	50	100
Harford	45	90
Howard	90	90
Kent	90	90
Montgomery	30	60
Prince George's	40	90
Queen Anne's	60	60
St. Mary's	45	90
Somerset	50	120
Talbot	90	90
Washington	50	100
Wicomico	120 (min)	135 (max) per 6 days
Worcester	60	90

Source: Maryland State Department of Education

Tide Seems to Be Turning:

VA & MD Lawmakers Push to Boost Recess & P.E. in Elementary Schools

According to WAMU news piece from March 8, 2018:

- Lawmakers in Virginia and Maryland are looking at ways to expand recess and physical education in elementary schools amid growing concern that kids don't get enough exercise.
- Maryland Del. Jay Walker (D-Prince George's County) has introduced a bill that would guarantee elementary school students 150 hours a week of physical activity, including at least 90 minutes of physical education classes. The rest could come from other "developmentally appropriate moderate-to-vigorous activity, including recess."
- "It's really staggering how out of a shape a lot of the kids are," said Matt Slatkin, a P.E. teacher at Newport Mill Middle School in Kensington, describing his sixth-grade students. "I'm talking mile runs above 18 minutes — when they're giving their best effort." Slatkin adds, "For a lot of these kids, [recess & PE are] the only physical activity they get each week."
- Slatkin notes that low-income and minority students may have the most difficulty getting exercise outside of school if they have to pick up siblings or have other responsibilities. And kids who don't have enough money have a hard time playing organized sports "because the costs have skyrocketed," he added.
- A [legislative analysis](#) of the Maryland bill suggested that to meet its requirements, Montgomery County would need to hire 133 more P.E. teachers at a cost of more than \$10 million next school year. In Virginia, however, it's a different story: A bill that would allow school districts to take a little bit of time from core academic subjects and use it for more recess won approval from both houses. The bill would allow recess to be counted as instructional time — by reducing the time required for the four core academic areas: math, English, science and social studies.
- Virginia Del. Karrie Delaney (D-Fairfax and Loudoun counties) said doing so would be a win-win, according to parents she's heard from. "Those are the [four] areas where our children are underperforming because they simply don't have the time to burn off that energy,"

[As Roanoke's Channel 7 reported on June 4, 2018:](#) According to the Montgomery County (VA)'s superintendent, Mark Mear, research shows that kids do better in school when they have more time to play. This year, Virginia lawmakers approved an increase of unstructured play time be included in the school day. Kids will get 40-50 minutes of recess instead of the previous 20-30 minutes.

Academic Achievement & Physical Activity:

both/and - *not* - either/or

“Why Kids Need Recess – And Why It’s Endangered”

By Alia Wong = *Atlantic Monthly* [December, 2016](#)

“When, you might ask, did recess become such a radical proposal? In a survey of school-district administrators, roughly a third said their districts had reduced outdoor play in the early 2000s. Likely culprits include concerns about bullying and the No Child Left Behind Act, whose time-consuming requirements resulted in cuts to play. [\[1\]](#)

Disadvantaged kids have been the most likely to be shortchanged: According to a 2003 study, just 56 percent of children living at or below the poverty line had recess, compared with 83 percent of those above the poverty line; a similar disparity was noted between black children and their white peers. [\[2\]](#)

The benefits of recess might seem obvious—time to run around helps kids stay fit. But a large body of research suggests that it also boosts cognition. Many studies have found that regular exercise improves mental function and academic performance. [\[3\]](#) And an analysis of studies that focused specifically on recess found positive associations between physical activity and the ability to concentrate in class. [\[4\]](#)

The Studies:

[\[1\]](#) Burris and Burris, “Outdoor Play and Learning” (*International Journal of Education Policy & Leadership*, Nov. 2011) [^](#)

[\[2\]](#) Roth et al., “What Happens During the School Day?” (*Teachers College Record*, April 2003) [^](#)

[\[3\]](#) Etnier et al., “The Influence of Physical Fitness and Exercise Upon Cognitive Functioning” (*Journal of Sport & Exercise Psychology*, Sept. 1997) [^](#)

[\[4\]](#) Centers for Disease Control and Prevention, “The Association Between School-Based Physical Activity, Including Physical Education, and Academic Performance” (July 2010) [^](#)

“Brain Breaks” to Promote Learning-Readiness

The Studies (cont.)

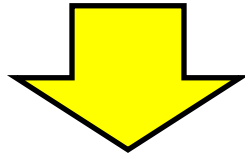
[5] Pellegrini et al., “The Effects of Recess Timing on Children’s Playground and Classroom Behaviors” (*American Educational Research Journal*, Winter 1995) [^](#)

[6] Jarrett et al., “Impact of Recess on Classroom Behavior” (*The Journal of Educational Research*, Nov./Dec. 1998) [^](#)

[7] Barros et al., “School Recess and Group Classroom Behavior” (*Pediatrics*, Feb. 2009) [^](#)

[8] Pellegrini and Bohn, “The Role of Recess in Children’s Cognitive Performance and School Adjustment” (*Educational Researcher*, Jan./Feb. 2005) [^](#)

[9] ***Texas Christian University LiiNK Project**, “End of Year Report” (2015–16) [^](#)



TCU’s “LiiNK” research prompted some Sligo Creek classroom teachers to implement “brain breaks” separate from recess

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- Significant and immediate impacts on students’ classroom performance, as reported by teaching staff

Example: Cincinnati Public Schools - 1970s

Academic + Physical Rigor

- Academic rigor via College-Preparatory curriculum (Classics, Latin & Greek roots) that prepared students for entrance exam to Walnut Hills High School, #1 high school in Ohio & #47 nationally, [according to US News & World Report](#).
- Physical rigor via weekly physical education both outdoor and indoor in a fully-equipped dedicated gymnasium, allowed upper elementary students the opportunity to compete annually against other public schools in three sports: track & field, volleyball, and gymnastics.

Equity Issue:

Whereas in prior decades, parents could depend on public schools for physical fitness, parents nowadays are increasingly on the hook for extracurricular sports programs that can be out-of-reach pricewise for many families in our county.

Investments in Movement

Given –

(1) scheduling impediments that pre-empt physical education for students in all grades throughout the school year; combined with (2) limited experiences in sports and physical fitness that many of our students bring to school; and (3) emerging concerns around the negative health impacts of screen time, in addition to a sedentary lifestyle –

These challenges, consequently, underscore (4) the need for elementary schools to make a conscious attempt to “invest” in the quality of daily outdoor play by (5) maximizing each physical education session (6) through “front loading” instruction time toward “**optimizing**” the use of each piece of recess equipment:

- **Rubber playground ball**
- **Soccer ball**
- **Basketball**
- **Jump rope**
- **Hula hoop**
- **Foam throwing disc***
- **Red/blue “pinnie” jerseys**
- **Set of 4 bases**

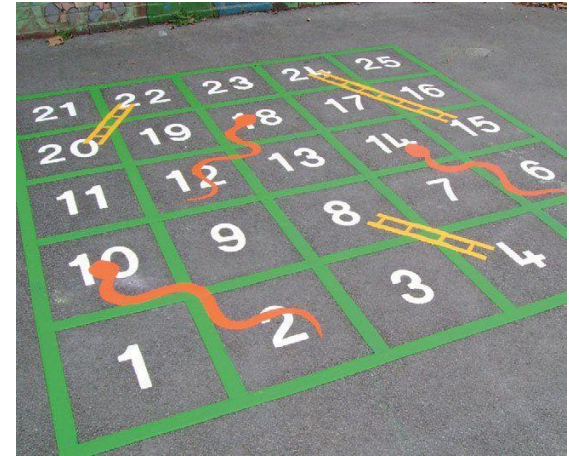
Investments in Blacktop & Field Games

- **Recess Blacktop:**

- (a) New recess playfield allows opportunity to identify blacktop playground games
- (b) Modify blacktop as needed during recess field construction
- (c) “Teach” kids how to play via physical education instruction

- **Suggested Blacktop Games:**

- (a) Four Square
- (b) Hopscotch
- (c) Snakes & Ladders
- (d) Maze (*per Ms. Johnston – Wellness Comm. staffmember*)
- (e) JUMP station: Markings for standing, running & triple jump
- (f) RUNNING station: 2-3 running lanes for 25-yard dash



- **Suggested Field Games:**

- (a) Soccer
- (b) Capture the Flag
- (c) Kick the Can
- (d) Speedball [*as played by Mr. Pinate in years past with upper elementary students*]
- (e) *Ga Ga Ball [**specifically requested by Sligo Creek students*]

- ❖ **Solicit Parent Volunteers:**

Reinforce school-designated blacktop and field games at recess (also, help students learn finer points of jumping rope)

- ❖ **Building Movement Plan:**

Consider more expedient path from lunchroom to recess field in order to maximize time spent at recess and minimize potential for student misbehavior en route to play field – this would require revising the Building Movement Plan.

- ❖ **Install Additional Sound Reinforcement in the Lunchroom:**

Work with MCPS’s Marla Caplon (Director of Food & Nutrition Services) to improve cafeteria acoustics so as to make lunch more pleasant for both students and staff and thereby decrease number of disciplinary actions caused/exacerbated by noisy environment

Investments in Physical Activity

- **Kickball with Local Firefighters** was well received by students 2015-2017 but discontinued, sadly, due to potential for injury – new captain to resume kickball with students?
- Pair of visits from **Silver Spring YMCA** demonstrated untapped potential in standard playground equipment that was released once adult professionals instructed students in variant uses
- **3rd Grade Soccer Scrimmages with Coach Remi** – Recess paraeducator staff and Sligo Creek parents have attested to the ability of guided instruction to have an immediate and significant effect on the quality of soccer games at recess
- **Fundamentals of tennis with 5th grade students**, as implemented by Ronnie McGaskey & Chris Richardson provided special opportunity to utilize a resource otherwise not found at elementary schools

Additional opportunities for incorporating movement

- School Socials: Ninja Obstacle Course & other types of “movement parties”
- Mindfulness/Yoga in Outdoor Classroom – as demonstrated by Remi Parker/April McGaskey in Spring, 2017 – and also in classroom (e.g., breathing techniques)
- Movement-Oriented Assemblies: seek out presenters who incorporate movement at school assemblies in various ways
- [“The Daily Mile”](#): taking place in 3,600 primary schools each day in 25 countries worldwide

Sligo Creek Playground Renovation



AERIAL VIEW



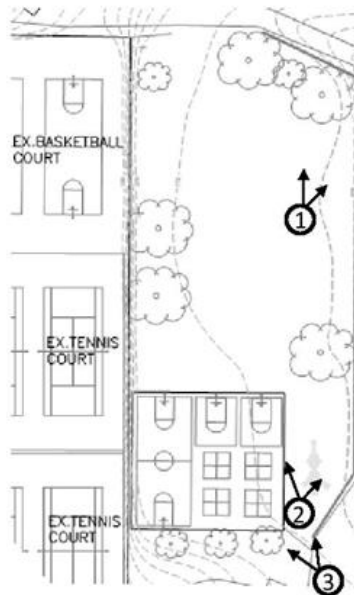
CONDITION 1



CONDITION 2



CONDITION 3



EXISTING CONDITIONS

1"=80'-0"



PLAYCUBES™ 7.0



AROUND THE BEND

PROJECT DESCRIPTION

This playground is being re-envisioned as a space that integrates play into the ordinary with a focus on sensory experiences. With a playground that is roughly half of that proposed on new school sites, the formal play equipment is relocated to a central location where students can have "break out spaces." Knowing that there is little relief from the hot sun at this school, additional shade trees are being proposed along with a 20'x20' pavilion for outdoor learning opportunities. The few shade trees that do exist are being saved and in one case, being celebrated with a new garden under the canopy that will serve to protect the tree from foot traffic and compaction. The garden will be an experiment in the use of colors and textures for the kids to learn. To reinforce the garden versus play area, small boulders are introduced that serve as visual barriers, but also allow the students to climb and sit. Near the entrance, a large six foot diameter compass is proposed inset into the new flexipave play area, providing learning opportunities. Expanding on play for all, the large existing retaining wall with the mural on the west side of the playground is going to be repainted and fitted with textures that provide a sensory experience for those kids at school with Autism. The proposed play structures incorporate "negative space" that allows kids to climb inside and have quiet moments to themselves when the needs arises.

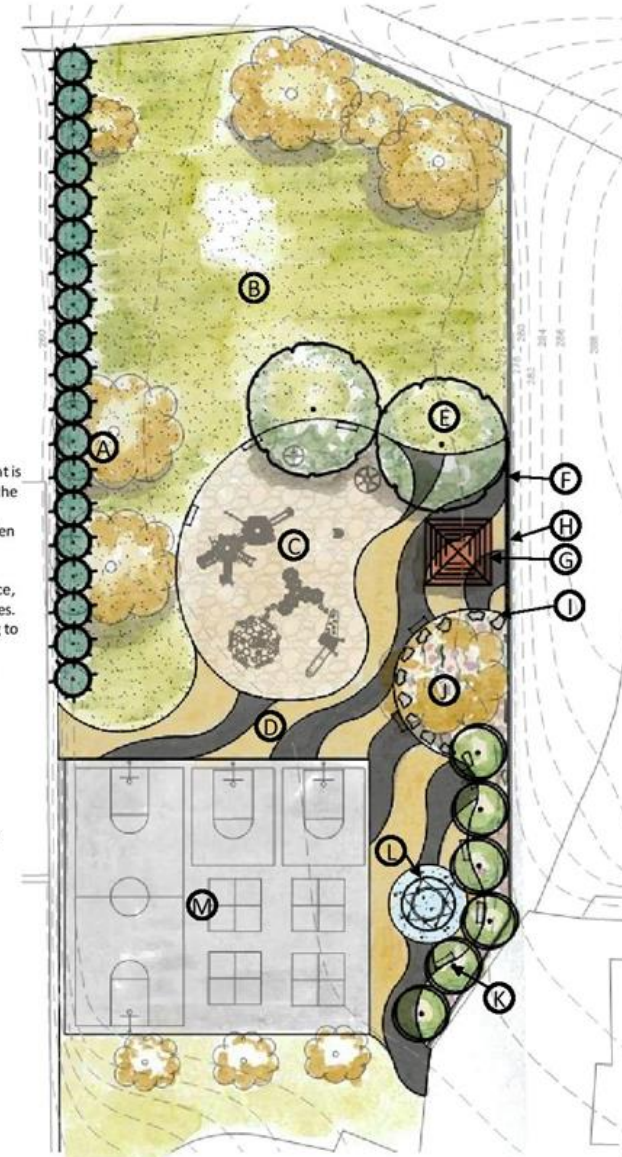
- (A) Proposed screening trees – will provide a visual barrier from the existing athletic courts
- (B) Proposed bermuda turf grass – will provide a natural grass that holds up to heavy use
- (C) Proposed playground – has all inclusive play with negative space for climbing within
- (D) Proposed flexi-pave – will clean the water as it passes through, provide soft surface and have aesthetic values
- (E) Proposed shade tree – will provide shade to reduce the amount of heat hit the surface
- (F) Proposed sensory texture wall – will give an opportunity to experience different types of textures
- (G) Proposed shade structure – will be used as an outdoor educational space under shade
- (H) Proposed sensory mural – will have a space to experience multi-sensory by drawing or painting
- (I) Proposed landscape boulder – will prevent children to run through the butterfly garden
- (J) Preserved existing tree – will keep the historical value of the site
- (K) Butterfly garden – will have an opportunity to increase children's knowledge of butterflies and plants
- (L) Stamped concrete – will be in compass rose pattern
- (M) Restripping of black top – will provide a safe and usable play space



TEXTURE BOARD



SPINNER CUPS



DETAILED STUDY AREA

1"=40'-0"

New Play Equipment – Including Resources for Autism Students

Outdoor Recess: Students as Equipment Managers

- Ms. Marino and Student Government Administration (SGA) is working with Recess Committee on identifying student helpers to serve as equipment managers.
- SGA equipment stewards provide vital service that helps minimize equipment loss, while providing character building experience in responsibility and public service.
- Past experience validates the *critical need* for student equipment managers throughout the entire school year, particularly given the limitations of recess paraeducator staff.
- Possibility of using “senior” SGA helpers to restock Recess Cart as needed during middle of the week, given limited allocated time of Recess Coordinator?

Indoor Recess: Best Practices

- Use of **Promethean Boards for Movement-Based Websites**, such as *Go Noodle*, *Just Dance* & the like:
 - Paraeducator staff (as well as substitute teachers) need to be trained to set up movement stations on the Promethean for Indoor Recess.
 - In the past, some classroom teachers have worked at the grade-level to identify separate Indoor Recess classrooms for (a) noisier movement-oriented activities vs. (b) quieter room for reading and art activities.
- **Essential Resources for Indoor Recess – “Approved Checklist”**
 - Recess Committee invites classroom teachers and paraeducator staff to give additional input on DRAFT document [[see next slide](#)] that specifies stimulating and developmentally-appropriate activities for (a) K-1, (b) 2-3, and (c) 4-5
- **Ensuring parity of Indoor Recess activities** for each classroom:
 - Administration (and/or Lead Teachers) are needed at the beginning of the school year to inspect each classroom to ensure readiness for Indoor Recess using “official checklist” devised by Recess Committee, with input from classroom and paraeducator staff
 - PTA funds should/can be made available for classroom teachers who need help purchasing Indoor Recess resources – particularly those new teachers whose classrooms lack sufficient materials

Indoor Recess:

Stimulating & Age-Appropriate Activities

- Based on consultations with classroom teachers, as well as paraeducator staff, who actually carry out and supervise recess, we have determined (i.e., “**draft document**”) the following resources and activities to be stimulating and developmentally-appropriate for the following grades:
 - The youngest grades (**K-1**) generally enjoy art activities [i.e., construction paper, plain paper, markers, crayons, colored pencils], simple crafts, building blocks, Lincoln logs, “Duplo” Lego bricks, and puzzles. Younger grades have also responded positively to the use of a dance & movement website called “Go Noodle” (which is free), which classrooms can access through their Promethean whiteboards. Some younger grades also incorporate indoor movement via stepping stones, balance beams, foam toys, balloon play (e.g., balloon volleyball/badmitten) – even hand clapping games. Some 1st grade students might be ready for Guess Who (made by Hasbro) and Spot It (card game),
 - **2nd & 3rd** grade students are well served with all the resources listed above. Additionally, 2nd & 3rd graders are better able to handle play dough and regular-sized Legos, as well as simple board games, such as Connect Four, Trouble, and even Monopoly Junior.
 - **4th & 5th** graders still enjoy most of the activities listed above, although one 4th grade teacher informed me that older students favor “Just Dance” videos (selected from YouTube) over “Go Noodle,” which is geared toward younger children. Older grades also enjoy online games (Google Classroom via Chromebooks), as well as Battleship, Apples to Apples, Mancala, and Le Petit Bac, in addition to origami, playing cards, and tabletop football (with ye olde triangular paper “footballs”). Older students can add drama to their games of Connect Four by using a chess timer to speed up play. However, Twister, that classic party game, is a judgement call that needs to be made on a classroom-by-classroom basis.
 - ALL classrooms should be equipped with a reasonably broad range of age-appropriate children’s literature and reading materials to allow students the choice to read for pleasure during unstructured play time.
 - Due to concerns about health impacts of screen exposure, Recess & Wellness Committee strongly discourages the use of videos as the chief Indoor Recess activity (an issue that has come up when classrooms are combined due to staffing shortage) – especially as a substitute for physical education

School Survey

- Input from classroom teachers regarding movement opportunities in the classroom
- Input from recess paraeducator staff regarding recess needs and challenges
- Input from parents regarding additional opportunities for incorporating movement at school, as well as home
- Raise awareness around the need to find **new Recess Coordinator** when the current parent volunteer leaves Sligo Creek at the end of the 2019-2020 school year

Suggested Action Steps for Parents, Teachers & Administrators

Parents & PTA

- Seek out opportunities for movement -- throwing, catching, kicking, climbing, walking, running, biking – at home, especially in the morning to promote learning-readiness.
- Encourage outdoor play when/wherever possible – utilize public parks if play space is limited at home.
- Limit screen time, especially in the evening, given potential for sleep disruption.
- Walk and/or bike to school when possible – for extra credit, try the “Daily Mile”!
- If finances allow, seek out movement-oriented extracurricular activities (e.g., Girls on the Run, tennis).
- Allocate PTA (and/or SCEF) monies to fund movement-oriented assemblies and school functions/resources.

Teachers & School Staff

- Incorporate movement and mindfulness into the daily curriculum whenever possible – including “brain breaks” to allow students opportunities to burn off energy and return to class ready to learn.
- Utilize “approved checklist” to ensure that your classroom is equipped at the beginning of the school year with a sufficient range of stimulating and age-appropriate activities – including children’s literature.
- Ask PTA for help purchasing additional Indoor Resource activities, if needed – especially if new or young teacher who is still in the process of building up classroom resources.
- Work with other grade-level teachers to identify separate spaces during Indoor Recess for movement-oriented games vs. quieter, more contemplative activities.

Administrators

- Introduce the Recess Cart at grade-level “expectations assemblies” at the beginning of the school year.
- Support SGA’s “recess equipment managers” program and implement at the beginning of each year.
- Also at the beginning of each school year: Ensure that each classroom is properly resourced for Indoor Recess.
- Incorporate school-based movement & mindfulness strategies as part of Staff Development program.
- **Reconnect with MCPS Construction/Design team:**
 - *Incorporate “Ga Ga Ball” space & blacktop games into recess field renovation plan = safe spaces for running, jumping & disc play

We hope to one day add another adjective - “physical” - to our school creed:

