



Recess is Essential for Student Success – But Access is Limited

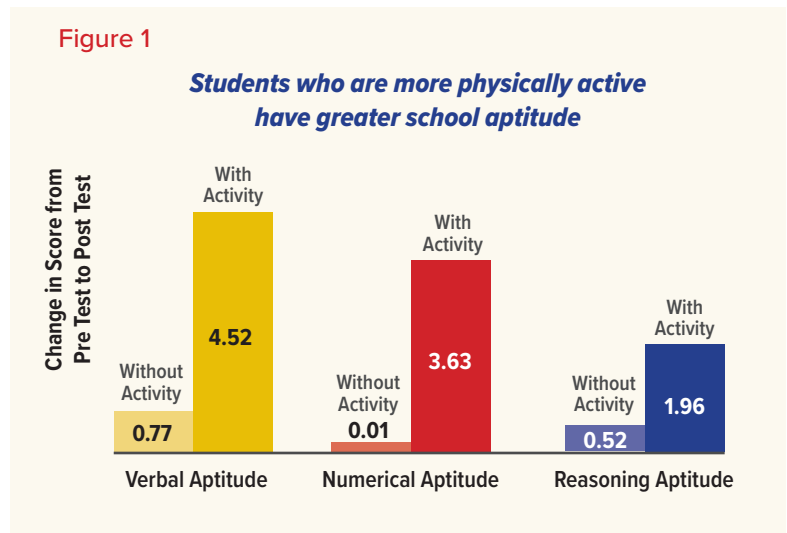
Students need opportunities that improve their social and emotional well-being to thrive and succeed in school. Ensuring students’ daily access to recess is one way to achieve this, and several countries mandate recess because they see it as essential to students’ success. For example, in Finland, elementary students have **75 minutes of daily recess**, a far cry from the average 27 minutes a day received by some American students across the nation. The U.S. Centers for Disease Control and Prevention recommends that students have at least **20 minutes of daily recess**. Research has demonstrated powerfully that recess is an extremely effective strategy for improving the cognitive, physical and social-emotional well-being of students.

Cognitive Benefits

A large body of research consistently finds important cognitive benefits when students have access to recess. One study¹ found that when students were more active, their school aptitude increased, they were more creative and cognitively flexible as a result. Students were placed into two groups, with one group participating in an additional 10-week program consisting of moderate-to-vigorous physical activity during recess. Results showed that students in the more active group were more cognitively flexible than their peers – able to shift between different concepts in response to change. Students with high cognitive flexibility are able to adjust and adapt their thinking as they learn new concepts.

Since all students participated in some form of physical activity, it is expected that there would be a change in pre- and post-test scores for the variables measured by researchers. However, **Figure 1** shows that students who were more physically active during recess had greater increases in scores from pre- to post-tests than those who were less active after completing the 10-week program. Students who do not have access to daily recess would not have the opportunity for this activity, nor would they realize the same benefits.

Physical activity increases blood flow, which increases the amount of oxygen

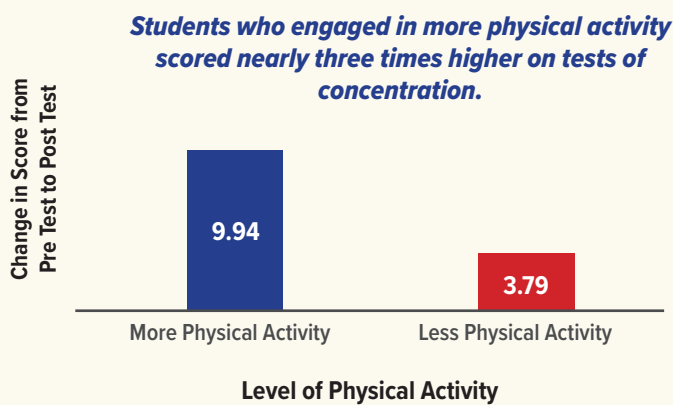


¹ Latorre-Román, P. Á., Berrios-Aguayo, B., Aragón-Vela, J., & Pantoja-Vallejo, A. (2021). Effects of a 10-week active recess program in school setting on physical fitness, school aptitudes, creativity and cognitive flexibility in elementary school children. A randomised-controlled trial. *Journal of Sports Sciences*, 39(11), 1277–1286. <https://doi.org/10.1080/02640414.2020.1864985>

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flow to the brain. This increase in oxygen is crucial for cognition,² which concerns students' ability to learn and retain information. Also, more oxygen can have substantial positive effects on students' neuroplasticity and cognition. Neuroplasticity, or brain plasticity, is the brain's ability to reorganize itself through a constant process of forming neural connections. Jo Boaler, a leading expert in mathematics education, points specifically to the importance of **neuroplasticity and cognition** for students as they learn new material. The more plastic a student's brain is, or the more a student's brain can grow, the greater their conceptual understanding is, and giving students recess can help start this process. An additional cognitive benefit is in students' increased ability to concentrate. in **Figure 2**, one study³ demonstrated that students who were more physically active had better concentration than those who were less physically active.

Figure 2



According to the American Academy of Pediatrics, recess helps improve students' motor skills, which help them move and complete tasks efficiently. Motor skills can include jumping, walking, holding, typing, etc., and the development of these skills is directly connected to students' cognitive activity. Neuroscientific and psychological research⁴ demonstrates that these skills are needed for students to reason and plan, which also impacts their academic performance.

Additional cognitive benefits when students have daily access to recess include:

- Improvement in memory retention⁵
- Increased attention⁶
- Greater ability to concentrate⁷
- Stronger executive functioning skills, e.g., planning, organizing and time management⁸

When students play during recess, they have increased opportunities to practice and improve these skills, all of which improve their academic performance.

2 Anyone can learn to high levels - YouCubed. (2019, May 24). YouCubed. <https://www.youcubed.org/evidence/anyone-can-learn-high-levels/>

3 Budde, H., Voelcker-Rehage, C., PietraByk-Kendziorra, S., et al., 2008. Acute coordinative exercise improves attentional performance in adolescents. *Neurosci. Lett.* 441, 219–223

4 Wang, L., & Wang, L. (2024). Relationships between Motor Skills and Academic Achievement in School-Aged Children and Adolescents: A Systematic Review. *Children (Basel, Switzerland)*, 11(3), 336. <https://doi.org/10.3390/children11030336>

5 Centers for Disease Control and Prevention, SHAPE America — Society of Healthy and Physical Educators, Robert Wood Johnson Foundation, & Michael, S., et al. (2015). Recess: a vital component of school health. *Journal of School Health*, 740–758. https://www.cdc.gov/healthyschools/physicalactivity/pdf/recess_data_brief_cdc_logo_final_191106.pdf

6 Centers for Disease Control and Prevention, SHAPE America — Society of Healthy and Physical Educators, Robert Wood Johnson Foundation, & Michael, S., et al. (2015). Recess: a vital component of school health. *Journal of School Health*, 740–758.

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8 McCarthy, C., MD. (2020, October 27). 6 reasons children need to play outside. Harvard Health. <https://www.health.harvard.edu/blog/6-reasons-children-need-to-play-outside-2018052213880>.

Social-Emotional Benefits

Much of the research on recess specifically focuses on the need for students to have unstructured time to play⁹ as it allows them to practice a variety of skills. Researchers also have found a relationship between reduced recess time and students' declining health, suggesting that the opposite is true: When students have access to recess, they have better mental well-being¹⁰ When students are allowed time for free play, they gain other skills that are useful not only on the playground, but in and outside the classroom, including conflict resolution, communication and negotiation.¹¹ Students learn to be creative in designing their own activities during recess. According to Peter Gray, a developmental psychologist at Boston College, play allows children to form deep relationships with their peers.¹² They also learn informal rules about social interactions as they learn to share and negotiate with peers, resolve conflicts and communicate and work collaboratively to achieve goals. Recess also gives students an outlet to expend energy in productive ways that, together with the above, can also lead to a reduction in disruptive behavior in the classroom.

Physical Benefits

Recess has numerous physical benefits for children. It allows students to be more active, which can help combat childhood obesity. Students who play at school burn calories, and grow their cardiovascular health, all while learning how to take care of their physical health. In one study¹³ measuring children's physical activity and their cardiovascular health, researchers found that children who were engaged in moderate-to-vigorous physical activity had higher peak oxygen intake, an indicator of aerobic fitness, which is also essential for overall health.

Fourteen States Support Students by Mandating Recess – But Not Massachusetts

Currently, 14 states¹⁴ have mandated daily recess for elementary students: Arizona, Arkansas, California, Connecticut, Florida, Georgia, Illinois, Louisiana, Missouri, New Jersey, Rhode Island, Tennessee, Virginia and Washington. Legislation in California, Connecticut and Washington has extended recess requirements to include middle school students. The length of recess varies from 20 to 40 minutes. The CDC recommends a minimum of 20 minutes of daily recess. Several states exceed the 20-minute recommendation: California, Washington, Illinois and Virginia require daily recess of 30 minutes; Tennessee requires 40 minutes for elementary students; and Arkansas requires a *minimum* of 40 minutes for elementary grades. While Georgia requires daily recess for K-5 students, its law recommends but does not require recess be 30 minutes.

9 <https://www.cdc.gov/physical-activity-education/recess/index.html>

10 Gray, P., Lancy, D. F., & Bjorklund, D. F. (2023). Decline in independent activity as a cause of decline in children's mental well-being: Summary of the evidence. *The Journal of Pediatrics*, 260, 113352. <https://doi.org/10.1016/j.jpeds.2023.02.004>

11 https://www.cdc.gov/physical-activity-education/media/pdfs/2019_04_25_SchoolRecess_strategies_508tagged.pdf

12 Gray, P. (2019). Evolutionary functions of play: Practice, resilience, innovation, and cooperation. In P. K. Smith & J. L. Roopnarine (Eds.), *The Cambridge handbook of play: Developmental and disciplinary perspectives* (pp. 84–102). Cambridge University Press.

13 Füssenich, L. M., Boddy, L. M., Green, D. J., Graves, L. E. F., Fowweather, L., Dagger, R. M., McWhannell, N., Henaghan, J., Ridgers, N. D., Stratton, G., & Hopkins, N. D. (2015). Physical activity guidelines and cardiovascular risk in children: a cross sectional analysis to determine whether 60 minutes is enough. *BMC Public Health*, 16(1). <https://doi.org/10.1186/s12889-016-2708-7>

14 State laws – kids need recess. (n.d.). <https://kidsneedrecess.com/statelaws/>

Recess in Massachusetts

Massachusetts does not require districts to provide recess to any student, although individual districts have their own policies that mandate this. Public data from the Massachusetts Association of School Committees reveals there are 72 districts which have an explicit recess policy within their school committee policies, which outlines at minimum which students must have recess. Although at least 72 districts in the state have a recess policy, there is great variation among them. Table 1 demonstrates that there is a range of recess length for the 27 policies that specify the amount of recess time. Note: There is overlap, as four districts include policies for elementary and middle school students.

Table 1. The distribution of districts and the length of recess as stated in their policies.

Grade Level	Less than 20 minutes	Between 20-30 minutes	More than 30 minutes
Elementary	6	22	0
Middle	2	2	0

Policy and Practice Recommendations

The benefits of physical activity for overall health are widely known, and the same is true for kids and recess. If Massachusetts requires 30 minutes of daily recess for all students, the evidence suggests that our students will experience:

- A positive increase in verbal, numerical and reasoning aptitude
- Better memory and attention span
- Greater ability to concentrate
- Increased opportunities to communicate, negotiate and resolve conflicts with others

In addition to providing daily recess for all students, the state should ensure this time does not include other tasks, i.e., lunch, and/or transitioning to lunch. According to the CDC’s recommendation, recess also should be supervised, but unstructured, for students to reap the most benefits. It should not be substituted for physical education. Districts should make every effort to hold daily recess and only limit it due to extreme weather conditions. Lastly, recess should not be withheld or used as a punishment due to behavior or academic performance unless all other options to remediate have been exhausted. Further, in counting recess time toward time on learning, the state should emphasize that recess is crucial for ensuring students receive the cognitive, social-emotional and physical benefits needed for them to thrive in school.

These policy recommendations would align Massachusetts with several states that recognize that access to recess is important for enhancing student learning, academic outcomes and social-emotional learning.

