

Considerable research shows:

**Physical activity improves academic performance,
reduces discipline problems and lowers the dropout rate**

The Wellness Impact: Enhancing Academic Success through Healthy School Environments (GenYouth Foundation): excellent research summary and discussion
<http://www.genyouthfoundatio> http://www.genyouthfoundation.org/wp-content/uploads/2013/02/The_Wellness_Impact_Report.pdf
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2013 Institute of Medicine report: Kids need a daily hour of physical activity. Physical education should be a core subject.

http://www.washingtonpost.com/politics/institute-of-medicine-kids-need-daily-hour-of-physical-activity-and-pe-should-be-core-subject/2013/05/23/be893676-c3b3-11e2-9642-a56177f1cdf7_story.html

- Full report: <http://www.aahperd.org/naspe/publications/upload/shape-of-the-nation-infographic1.pdf>
- Infographic: <http://www.aahperd.org/naspe/publications/shape-of-the-nation-infographic.cfm>

Review of 14 studies: Robert Wood Johnson Foundation. Physical education, physical activity and academic performance: Eleven of 14 studies found that regular participation in physical activity is associated with improved academic performance.
https://folio.iupui.edu/bitstream/handle/10244/587/Active_Ed.pdf?sequence=2

Journal of Pediatrics review of 850 articles "Evidence-based physical activity for school-aged youth," After reviewing 850 articles, the panel recommended an hour of daily physical activity for youth.
[http://www.jpeds.com/article/S0022-3476\(05\)00100-9/abstract](http://www.jpeds.com/article/S0022-3476(05)00100-9/abstract)

The Association between School-based Physical Activity, including Physical Education, and Academic Performance. Centers for Disease Control and Prevention, 2010. A review /analysis of 50 studies. "Across all 50 studies, there were a total of 251 associations between physical activity and academic performance ..."
http://www.cdc.gov/healthyyouth/health_and_academics/pdf/pa-pe_paper.pdf

Active bodies, active minds: California Dept of Education research overview.
http://www.csba.org/EducationIssues/EducationIssues/Wellness/~/_media/Files/Services/PolicyServices/PolicyBriefs/201002_AcademicAchievement_FactSheet.ashx

Wood County research: Nature Journal: West Virginia students who were overweight, but aerobically fit did better on standardized tests than students who were healthy weight, but not fit. Aerobic fitness is a better predictor of academic performance than weight is. <http://www.nature.com/oby/journal/v15/n12/abs/oby2007377a.html> ; <http://www.wvgazette.com/News/theshapewerein/201202180160>

Effects of health-related physical education on academic achievement: SPARK. Physical education did not interfere with achievement and appears to have had positive effects <http://www.sparkpe.org/resultsSallis.pdf>

"Curricular physical activity and academic performance" (Pediatric Exercise Science 1997). When between 14 - 26% of time is devoted to physical activity, children's learning proceeds more rapidly, equaling and sometimes exceeding that of kids who did not have that activity. <http://www.mendeley.com/research/curricular-physical-activity-academic-performance>

"School-based physical activity does not compromise children's academic performance," an evaluation of Action Schools! BC, a physical activity program in the British Columbia schools (Medicine & Science in Sport and Exercise journal) http://journals.lww.com/acsm-msse/Abstract/2007/02000/School_Based_Physical_Activity_Does_Not_Compromise.21.aspx

Playworks. A review of the positive results of structured play. <http://www.playworks.org/why-play-matters/studies>

NIH: Distractable children consistently improve in their ability to concentrate after exercise <http://www.ncbi.nlm.nih.gov/pubmed/21814148>

Spark, by John Ratey: book, filled with cites attesting to the connection between physical activity and academic achievement www.johnratey.com

NIH: How parents can encourage physical activity. <http://esciencenews.com/articles/2008/07/15/childrens.physical.activity.drops.age.9.15.nih.study.indicates>

The amount of children's physical activity steadily declines as they get older: <http://esciencenews.com/articles/2008/07/15/amount.physical.activity.children.steadily.declines.they.get.older>

Easy reads and overviews:

* Institute of Medicine 2013 recommendation that PE be a core subject and kids get an hour of physical activity a day: <http://www.washingtonpost.com/politics/institute-of-medicine-kids-need->

[daily-hour-of-physical-activity-and-pe-should-be-core-subject/2013/05/23/be893676-c3b3-11e2-9642-a56177f1cdf7_story.html](http://www.abcnews.com/News/Health/daily-hour-of-physical-activity-and-pe-should-be-core-subject/2013/05/23/be893676-c3b3-11e2-9642-a56177f1cdf7_story.html)

* Moving and shaking in the classroom: ABC News.
<http://abcnews.go.com/GMA/story?id=7283772>

* NYT: "IF you want kids to excel, try gym class." Profiles of recent research.
<http://well.blogs.nytimes.com/2011/08/10/how-gym-class-can-help-students-excel>

* "Bikes, Balls in Class: How phys ed transformed one school"
<http://abcnews.go.com/WN/exercise-school-leads-learning/story?id=10371315>

* "Teachers trade space, traditional fixtures for fitness"
http://www.educationworld.com/a_curr/profdev/profdev174.shtml

* "Instructors make pitch for vigorous exercise to improve test scores"
<http://www.johnratey.com/Articles/Exercise%20lowers%20discipline%20problems%20and%20raises%20grades.pdf>

* Girls are participating in sports in record numbers, but exercise outside organized teams drops as adolescence approaches.
<http://health.usnews.com/usnews/health/healthday/080414/girls-participating-in-sports-in-record-numbers.htm>

Teens spend more time at computers, become less active as they grow older
<http://www.sciencedaily.com/releases/2007/02/070220003757.htm>