

Student Physical Activity and Health Literacy Study

Conducted by researchers from the University of North Carolina at Chapel Hill

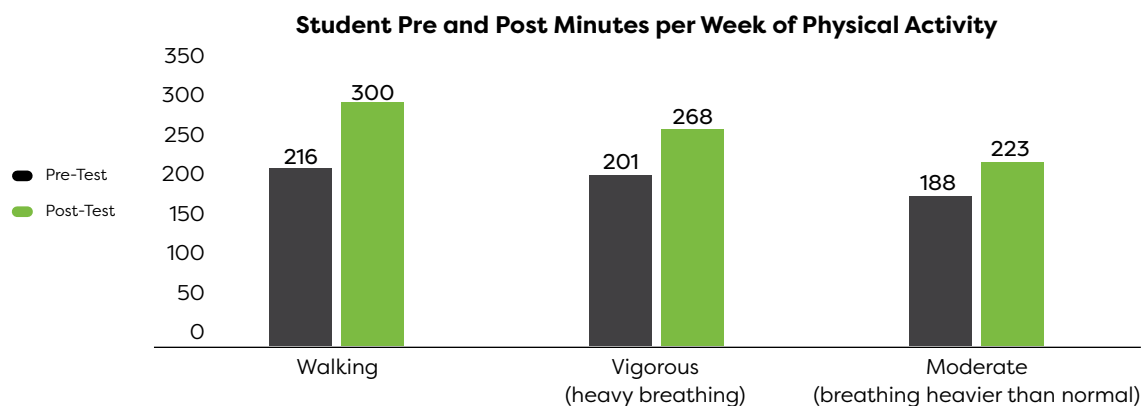
- Research Team:** Erienne Weight, Ph.D., and a team of researchers from UNC Chapel Hill
- Study Purpose:** To test the impact of The Walking Classroom on levels of student health literacy and physical activity before and after a school year using The Walking Classroom.
- Participants:** 137 teachers distributed the pre-test, and 110 distributed the post-test. The total student sample was 1,062 children. Ninety percent of the student-respondents were in grades 3-5, with the remaining 10% in middle school. There were also three high school student respondents representing less than 0.3% of the sample.
- Testing Dates:** Fall 2018–Spring 2019
- Methodology:** Physical activity was tested utilizing the International Physical Activity Questionnaire – Short Form (IPAQ-S). The IPAQ measures utilized included vigorous and moderate physical activity and walking wherein respondents indicate during the last seven days, how many days they participated in the activity for at least 10 minutes at a time, and then how much time they usually spent doing the activity on those days.
- Health literacy was measured utilizing questions from the established Walking Classroom podcast quizzes. Health literacy topic areas that were covered in five or more podcasts were flagged as key literacy areas. Final questions were selected and reviewed for clarity and content validity by a panel of experts including an internationally renowned exercise physiologist, a learning specialist, and an expert in survey methodology.
- Full Report:** Downloadable at thewalkingclassroom.org/research

Results

1 The Walking Classroom increases overall physical activity

Students demonstrated significantly higher levels of physical activity after one year of participation in the Walking Classroom program with end-of-year minutes per week significantly higher than beginning-of-year measures in walking, vigorous activity, and moderate activity.

On average each week, students **walked 84.5 more minutes**, participated in **66.8 more minutes of vigorous physical activity**, and participated in **35.3 more minutes of moderate activity**.



2 The Walking Classroom improves student health literacy

Students demonstrated significantly higher levels of health literacy after one year of participation in The Walking Classroom program with **end-of-year mean literacy test scores increasing by 10.7% overall across the sample of 1,062 students**. This is particularly impressive given that health literacy messages are generally less than one minute and most students listen to podcasts only one time.

Student health literacy knowledge was tested using the following true or false questions.

1. Exercise is important for maintaining a strong heart and preventing disease. [TRUE]



2. Exercise improves blood circulation and brings oxygen to your organs. [TRUE]



3. Walking can improve immune function and reduce your risk of getting colds. [TRUE]



4. Exercise decreases energy levels. [FALSE]



5. Research suggests that physical activity increases performance in school. [TRUE]



6. Exercise helps improve focus and concentration. [TRUE]



7. People who regularly exercise are more likely to feel stressed and depressed. [FALSE]



8. Endorphins are mood-boosting chemicals released when we exercise. [TRUE]



9. The human body is primarily water, so it is important to stay hydrated. [TRUE]



10. Our bodies only burn calories when we are moving. [FALSE]



11. Research shows that breakfast can improve concentration during school. [TRUE]

