



Walking and Bicycling to School and the Heavy Backpack

*Compiled by the Safe Routes to School National Partnership
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Many students are finding that even if they want to walk or bicycle to school, it is a difficult undertaking with the weight of their backpacks. This is especially relevant for students at the middle school and high school level, who tend to bring home a greater number of heavy books, musical instruments or projects each day. Suggested solutions are listed below. Some of the solutions involve a 'Walking School Bus' or 'Bike Train'. These are groups of students and parents who walk or bicycle together from meeting spots along a designated route through the neighborhood to and/or from school. For more about the Walking School Bus, go to: saferoutesinfo.org

Roller Backpacks

Some backpacks are now made with small wheels, so that they can also be used as 'roller luggage', preventing the need for carrying the weight on a student's back while walking to and from school. These are available at most luggage and department stores. (typically \$20-60)

The Little Red Wagon

This won't be 'cool' enough for high school kids, but parents of middle or elementary students could pull a wagon to school loaded with books and other items. This works especially well with a Walking School Bus, where several students' worth of backpacks, musical instruments and/or projects can be loaded onto a wagon (or sled in snow areas) and pulled to and from school.

The Neighborhood 'Pace Car'

Let's say there are several students in your neighborhood who attend the same school, or schools next to or near each other, with similar start times. Each day, a group of students walks or bikes to the designated Pace Car house and drop their books into the Pace Car. That parent or high-schooler then shuttles everyone's books, backpacks, musical instruments and projects to school.

Bicycle Racks, Panniers & Other Similar Options

Bike racks that attach to the frame over the front or rear wheel of most bicycles are available at any bike shop. Racks are designed to carry weight on top, or hanging from the sides, and panniers, bags and baskets are available that can be mounted onto any standard rack. Rear racks are much more common, since they can handle more weight and have more carrying capacity. Weight is also easier to balance on the back of the bike.

*A Safe Routes to School program in Colorado got a local group to
install donated racks on student bikes to encourage them to ride to*

school.

Panniers

Bike panniers are waterproof bags that attach to a regular bike rack mounted on the back of a bicycle over the rear wheel (typically \$20-50 at most bike shops). These can hold heavy books and other items, without any pressure on a student's back.

Basket/Bags

Collapsible metal or nylon/cloth shopping bags are made to attach to a bicycle rack and could hold backpacks or books, etc. (typically \$20-25 at some bike shops) Another option is a basket that fits over the front wheel of a bicycle, attached to the frame. (typically \$10-15 at some bike shops)

Trailer

If there is someone in the neighborhood with a bicycle trailer, then students' books, backpacks, etc. can be loaded onto it and shuttled to school, similar to the Pace Car approach detailed above. The trailer could be locked to a school bicycle rack during the school day, then reloaded for the trip home in the afternoon. (new trailers typically cost anywhere from \$80-250)

E-Books

Accessibility of books online prevents the need for carrying heavy paper books back and forth to and from school. Students can read books online and keep the book at school.

Some schools are experimenting with 'flash drives' – teachers make excerpts from that day's book assignment available on this tiny memory disk that students can carry home on a cord or in a pocket.

Google books (<http://books.google.com/>)

The Gutenberg Project (http://www.gutenberg.org/wiki/Main_Page)

Make Books Accessible Outside of School

Buy one or two of your student's heavier books used on the internet, or choose the books that they will have to bring home most often. Then they will have a set of books at school in their locker, and one at home without having to carry them between the two in their backpacks each day.

This can be taken a step further by starting a book co-op with neighborhood families, so that families can trade books back and forth.

Another option is to make sure the local libraries are carrying copies of all of the textbooks that the schools are using – several copies of each is very helpful. If you live in a place that has neighborhood libraries this is all the better; community centers, youth centers in churches, synagogues, etc., may also have libraries or agree to keep school text books on hand for neighborhood kids.

Some schools are even purchasing two copies of textbooks, one to leave at the school and one for use at home.

Bungee Knapsacks

According to a December 20, 2007 *Scientific American* article, "Here is something that will put a spring in your step: a backpack that bounces up and down on bungee cords instead of pounding the shoulders and back. The bag's designer envisions his creation as just what the doctor ordered to relieve the spines of schoolchildren..."

[Read more.](#)

("A Parent's Dream: Bungee-Powered Backpacks That Spare the Back", JR Minkel)