



Step into it: using pedometers to promote physical activity

Using pedometers can be an excellent way of motivating students to be active. Pedometers can be used to measure how active the students are during specific physical education activities or during the school day. The following article will answer some of the more commonly asked questions about pedometers as well as providing some practical ideas for using them with your class.

What are pedometers and what do they measure?

Pedometers have been used for centuries as people have tried to measure the distances that they travel while walking. The electronic pedometers of today are much more practical and accurate than those of previous years. The majority of pedometers available commercially record and display movement as the number of steps taken by the person wearing the device. Some brands of pedometers also have features to estimate energy expended, distance travelled and total time active.



What unit of measure should be used?

The unit of measure used to record the level of physical activity is often dependent on the features available on the pedometer. The most accurate and meaningful measure is to record the total activity time. If this measure is incorporated with the collection of step counts and the use of a reflective journal in which students record the frequency and intensity of activity undertaken, students will be able to make accurate assessments of their physical activity levels. To start off simply for primary students, it may be best to utilise the total step count per day as a measure of daily physical activity levels.

How many steps should we take?

It is important to be aware that when using step counts, there is no agreed minimum number of steps per day that are recommended. Studies have shown that setting a minimum target of steps per day can be a deterrent for inactive children as the number of steps may seem beyond reach. It can also lead to active students being

less active as they easily reach the daily goal and are not motivated to increase physical activity levels. It is important that each student collects baseline data of their current activity levels and then develops goals for personal step counts that are realistically achievable for them. Progressively, these personal step count goals can be increased as each goal is achieved, thus, maintaining students' motivation for increasing physical activity levels.

How should results be recorded?

Goal setting is the key to increasing physical activity time in young people. In order to set realistic goals for activity, students need to keep a personal record of their activity levels, e.g. step counts. The most effective way to do this is by encouraging students to maintain a personal step count record where they record their results from the pedometer for each day. One limitation of pedometers is they are not able to record the intensity or frequency of the activity undertaken. As students become more familiar with the use of pedometers, they could also record the frequency and intensity of the activity in a reflective journal each day.

What are some considerations when using pedometers with students?

As with any equipment use, guidelines need to be established with students in order to maintain pedometers in good working order and minimise loss and damage. Some general guidelines are as follows.

- Purchase the best pedometers that your school can possibly afford. Remember, the more features the pedometer has, the more meaningful the information will be that students will be able to measure.
- Number each of the pedometers and have a process for checking out and checking in pedometers. A school decision could be made as to if students are allowed to take them home overnight. Perhaps they could be barcoded and borrowed from the library.
- Allow students to explore how the pedometer works under teacher supervision. If you allow them to satisfy their curiosity under your supervision they are less likely to 'experiment' with the pedometer later!
- Allow students to have the opportunity to wear a pedometer over an extended period of time, e.g. all day, every day at school for a week, so that they can collect valuable information regarding their typical activity levels at school. Any shorter period than this and students' activity levels may be higher than usual due to the novelty of wearing the pedometer.

How can I use pedometers with my class?

The following are some practical ideas for introducing pedometers into your class:

- Be a role model. Wear a pedometer at school and model the proper care and use of this new gadget. Discuss why you are wearing the pedometer at school. Be prepared to answer students when they begin to ask, 'How many steps have you done today?'
- Encourage other staff members to wear pedometers. Perhaps encourage the principal to wear one! This is a terrific way to increase physical activity levels amongst the school staff and also build enthusiasm for using pedometers.
- Introduce pedometers to your students after they have watched the teachers use them for a few weeks. This will ensure that students are keen to wear them after not being able to play with the new toy straight away.
- Demonstrate to students the correct placement of the pedometer on the waistline directly above the knee. Ask all students to go for a practice walk of 100 steps and check the pedometer count.
- Ask the students to measure the number of steps between various points around the school, e.g. from the library to the hall. Students could add the number of steps between two locations. Using a pedometer easily integrates with mathematics activities.
- Ask students to graph their step counts. Students could develop graphs to provide a visual representation of their physical activity over a week. Graphs could be analysed as to the various reasons for changes in levels of activity each day.
- Have a step challenge between classes. Stage groups could have a friendly challenge of the total number of steps taken each day. There could even be a teacher step challenge.
- Ask all students to measure their activity levels over several recess and lunch times and reflect on how they could become more active during break time. Ask students to help design ideas to increase activity levels during recess and lunch.
- Ask students to measure their activity levels during class PE or sport time. Examine and discuss the differences between step counts for people playing different positions within the one game or between different PE activities.

- Ask students to compare their activity level after school with their level of activity at school. What are the differences? Challenge students to examine the reasons why their activities levels are different.
- Provide information to the school community about the use of pedometers in class and at school. Fun family activities around the use of pedometers can be provided in the school newsletter in an effort to educate families about the importance of an active lifestyle.

Where can I purchase class sets of pedometers?

Class sets of pedometers are available through a number of organisations. Remember, when purchasing pedometers ensure that they include the features that you require for measuring student activity levels such as step count and activity time. The following pedometers are currently on the market and available in class sets from:

1. The Australian Council for Health, Physical Education and Recreation (ACHPER) has two models of pedometers available for purchase.
 - **LS2505 2 function pedometer** which counts steps and exercise time. Includes safety strap.
 - **LS2525 5 multi function pedometer** which counts steps, exercise time, step to KM conversion, calorie burn conversion, standard clock function and includes a safety strap.

For further information on these pedometers go to the *ACHPER* web site at <http://www.achper.org.au/bookshop.php?id=118>
2. The National Heart Foundation has a pedometer and supporting materials available for purchase. Bulk discount rates are available. For more information on the features of the National Heart Foundation pedometers log onto the *Heart Foundation* web site at <http://www.heartfoundation.com.au/index.cfm?page=26>

What other resources are available?

The Centre for Health Promotion South Australia has developed a pedometer based health and physical activity resource for schools. This resource contains practical activities for students to explore physical activity through the use of pedometers. For further information on this resource go to the *Centre for Health Promotion South Australia* web site at <http://www.chdf.org.au> and follow the resource centre link.