

## Heart rate tests provide data

The USHA is trying to obtain research into the many health benefits handball can offer students.

A recent effort by Dick Farrell, who teaches handball in Williston, Vt., was a good first step. Here is what Farrell wrote:

We just finished a handball unit for Grades 5-8. It was quite popular, and a large part of it is due to the equipment the USHA supplied.

This is by no means a scientific study. My sample was only a few students, and I did not introduce the monitors until we were playing matches. The unit was composed of 12 classes, and I brought out the heart rate monitors in the seventh class, and the data for that class was questionable because the students needed more time to become comfortable with the devices.

Here's what I discovered.

The students would play for 20-25 minutes. We used a target heart rate zone of



**Williston students play one-wall, then get together to check their heart rate monitors.**

135 to 180 beats per minute. That is 66 to 88 percent of max. Results were as follows:

**Average heart rate (% time in target zone)**

137	59%
149	70%
147	76%
166	88%
151	84%

These were pretty average students in Grades 5-8 who like to be active and have slightly higher than average skills. They



were in a class of 20, and I had seven one-wall courts available.

The heart rate monitors should be introduced at least two classes before you want reliable results.

The unit started with many skill-development activities, followed by cooperative tasks, and developed into competitive activities.

That is where I wanted to see the heart rate results, and I was pleased.