

UBC Department of Physics and Astronomy (PHAS) Outreach

The free one-day event called “Faster, Higher, Smarter! A workshop on how learning how you move might help you do better in sports” was developed by PHAS Outreach in 2012.

The idea was to engage grade 6-8 girls in a real world scenario, sport performance, without emphasizing that the workshop was about physics. This was successfully achieved for most students, so there were few pre-conceived ideas about physics before the workshop.

The sports activities included

- Running and swimming
Principles behind running and swimming, and how to run faster
- Timing gate
Making your own timing gate
- Swinging and batting
Taking photos of batting/swinging form to improve performance
- Turning and twisting
Taking photos of objects with different centres of mass, to analyze how your body moves during sports

The girls were also able to meet and talk with the Engineering Physics Lab Director, and Physics and Astronomy undergraduate/graduate students.

Students were surveyed before and after the event. The results showed that after the event fewer students agreed with the statements “Physics is very boring” and “I don’t know what physics is about”. In addition more students agreed with the statements “I can do well in physics” and “Physics is a big part of our lives”.

