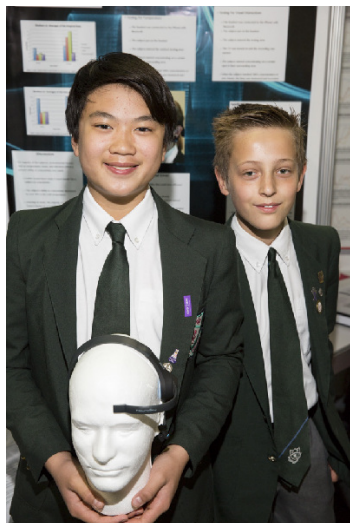


## CWSF 2015 - Fredericton, New Brunswick



### Braden Wilson, William Nguyen

#### How Clear is Your Focus?

**Challenge:** Discovery

**Category:** Junior

**Region:** Ottawa

**City:** Ottawa, ON

**School:** Ashbury College

**Abstract:** Concentration is a state of mind that is measured from brainwaves. An EEG headset measured brainwaves to determine the effects of environment factors on concentration. Fifteen subjects were tested with no distractions and then with a cold environment, music, and TV. Concentration was lowest in the cold environment and was equal with TV and music, and highest with no distractions.

#### Biographies

Braden - I was born in 2002 in Boston, Massachusetts, and I moved to Ottawa in 2006. In 2013, I switched schools to go to Ashbury College where my interest in science was accelerated. Our project was inspired by a toy helicopter that I had that could be controlled with your brainwaves using an EEG headset. This headset got me wondering how the headset worked, how your brain works, and what exactly are brainwaves. We wondered if this technology could be used to solve real world problems like helping the handicapped. For further investigation, we have plans about applying this technology to real world problems such as helping handicapped people manipula...

William - I was born in Ottawa, Ontario in 2002. I started going to Ashbury College in grade four. My friend and science fair partner Braden had a toy helicopter that could be controlled by an EEG headset. That headset got Braden and I wondering how the headset works, how the human brain works, and what brainwaves are. We wondered if this technology could help solve real world problems like for helping the handicapped. For further investigation, we have plans to apply this technology to help handicapped people manipulate the environment around them with only their mind. Advice that I would give to other students doing a project is to do the project on ...

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