2020 - 2021 High School Big Data Challenge

FINALISTS ANNOUNCEMENT

Using the Power of Open Data to Learn: Paving the Path to True Equality and Equal Access in Education

Under the patronage of Canadian Commission for UNESCO

The Big Data Challenge (BDC) for high school students is an inquiry-based, interdisciplinary, experiential learning program that strengthens students’ problem-solving and critical thinking abilities by working with Open Data. By allowing students to undertake independent research projects that tackle real-world problems, the BDC synergizes with both classroom and extracurricular experiences to foster an active digital citizenship position and prompt new sustainable development innovative ideas.

This year’s National Big Data Challenge encourages high school students across the country to apply their computational thinking efforts on UNESCO Sustainable Development Goal 4 (SDG 4) “Equity in Education”. We challenge students to examine Open Data related to their learning experiences, and to bring their results to their teachers, classrooms, and peers.

After review from academics and professional data scientists, the finalists have been selected and will now go on to compete at the National Big Data Day on February 28th. Each of the 15 teams will defend their work against a panel of expert judges. The event will be held completely remotely, with all video presentations and manuscripts available ahead of time on February 21st for public viewing on our website.

Please check our social media for updates and our website on February 21st for more information, and see below for the finalists!

**Inequity in Education: the Correlation Between Neighbourhood and School Performance in Ontario**
Shuyu van Kerkwijk, Florence Ho, Hibah Hussain, and Grace Ko
*University of Toronto Schools*

**How geographical factors influence student test scores**
Aneya Kazmi, Wendy Chen, Alice Du, Kelly Zhao
*Earl Haig Secondary School*
Economic cost and employment potentials for STEM and Non-STEM undergraduate majors in Canada
Luyuan Ge and Fengyuan Zhang
Bloor Collegiate Institute

Using Feature Importance Methods to Identify the Primary Factors Contributing to Education Index
Samuel Lu, Evan Skrukwa, and Shahryar Wasif
Westmount Charter School

Application of Multivariate Analysis in Identifying Factors Influencing Education Equity
Andrew Mao, Binder Nie, Nicholas Dong
Earl Haig Secondary School

Multivariate Analysis of United States Public Education Data to Optimize the Classroom Environment
Ammar Vora, Nishan Soni, Faiz Hanafi, and Vishwanath Wimalasena
Sir Winston Churchill High School
Robert Thirsk High School

The Role of Government Expenditure in Equitable Education
Jatin Mehta, Philip D'Costa, and Keval Patel
Erindale Secondary School

Investigating the Relationship between Poverty and Educational Success
Albert Choi, Jazli Muhammad, and Bobby Tang
Westmount Charter School

Educational Inequality Between Urban and Rural Areas
Joshua Lakdawala and Yash Jagirdar
Erindale Secondary School

A Study of How Money Invested in Secondary Students' Education Impact the Quality of Education in the Math and Science Fields
Raymond Ma, Rachel Dietrich, Ruby Miller, and Tenzin Dhonyoe
Runnymede Collegiate Institute
A Correlative Analysis of Educator Identified Factors and Global Student Assessment Scores
Natalie Jarycki
Oakridge Secondary School

The Correlation Between Economic Status and Quality of Education
Isaac Bahler, Samantha Chong, Nanya Anyaduba, and Nier Kamel
Lindsay Thurber Composite High School

Examining the Effects of Government Funding and Staff Compensation on Public School Completion Rates
Allan Cao, Ziyan Li, Sarah Zuo
Westmount Charter School

The Impact of the Student Nutrition Program on Academic Achievement in Ontario
Cristian Bogdan, Harshith Duba, Nathan Pfeffer, and Nada Salem
Earl Haig Secondary School

An Investigation into the Socioeconomic Factors Correlated to PISA Reading Scores
Orchee Haque, Sophie Hoyer, Stephanie Huynh, Sraddha Uppili
Westmount Charter School