

2021 HIGH SCHOOL–CÉGEP PHYSICS TEACHING AWARDS / PRIX DE L'ACP EN ENSEIGNEMENT DE LA PHYSIQUE AU SECONDAIRE ET AU COLLÉGIAL

British Columbia and Yukon / *Colombie-Britannique et Yukon*



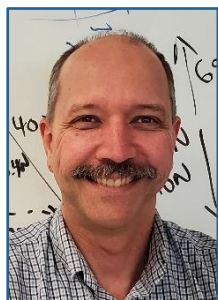
KELVIN DUECK, Pitt Meadows Secondary School

Awarded for his passion and dedication to teaching physics and making physics accessible to all through his physics YouTube videos.

Mr. Kelvin Dueck is a science and mathematics teacher who has taught at Pitt Meadows Secondary School for the past 24 years. He is passionate about empowering his students to learn on their own time and has been uploading his materials online (at www.pittmath.com) and his lessons online (on YouTube at <https://www.youtube.com/user/pmssmathteacher>) for the past decade.

His YouTube channel has nearly 3000 subscribers and over 680,000 views. He strives to create a classroom where students feel comfortable taking risks, making spectacular mistakes, and learning from those mistakes. Kelvin has also shared his resources electronically with other teachers in BC and around the world. His innovative and enthusiastic teaching style, his ability to inspire students about physics, and his creative use of technology in the classroom resulted in being recognized with a Prime Minister's Teaching Excellence in STEM Award in 2019.

Prairies and Northwest Territories / *Prairies et Territoires du Nord-Ouest*



MURRAY GUEST, Walter Murray Collegiate

Awarded for his passion and dedication to teaching physics and his work with the Knowledge and Education Exchange Network and Math 9+ program.

Murray is recognized for his work in teaching physics to students as a human endeavour while engaging them to communicate physics to themselves and others. He has done this by removing impediments to learning, talking about physical world situations which are as close to student experience as possible. He engages students to independently explore the physics dynamics through the eyes of a physicist. He continues to inspire students to become future physicists, engineers and professionals in diverse pursuits with a better understanding of the physical world around them as well as an appreciation of logical rigour of mathematics and physics.

He has a leading role in mentoring educators for their teaching practices. A positive impact on a teacher will in turn provide an ambassador for more than two decades with a positive influence on a few thousand youngsters, the future leaders and professionals of the country. Murray continues to influence the educators in positive ways.

Furthermore, engagement in the Provincial accreditation committee and his leading role in emphasizing the need and value of regular self-analysis of the student performance assessment across the curriculum. In our system, education does not end with teaching. Student performance assessment plays a prominent role. Murray recognized this on his own and continues to strive to make it a central theme of discussions in teaching not only in his classes but across the provincial school system.

For his outreach activities with the Knowledge and Education Exchange Network (KEEN) for the workshops between the university community and high school educators in a multi-disciplinary setting. He provided further engagement to connect students with the professional researchers and educators through a KEEN hallmark activity of Annual Nobel symposia and access to university resources.

Ontario



ASHLEY McCARL-PALMER, Waterloo Collegiate Institute

Awarded for her passion and dedication to teaching physics, her innovative teaching methods, and her commitment to collaboration and sharing with other teachers.

Ashley is driven to improve her practice continuously. She is a risk-taker who pushes her students to leap out of their comfort zones and feel more successful and accomplished as a result. Her students speak highly of her effort, her energy and her passion, all of which create a dynamic and positive learning environment.

Inquiry-based learning, or active learning, is well-established in Ontario physics classrooms after years of leadership and research from post-secondary institutions. Ashley has adopted these practices, which focus on conceptual learning and student-constructed knowledge. She spirals content to give students multiple opportunities to experience and consolidate important concepts, witnessing deeper understanding and retention in her students.

Never one to turn down a learning opportunity or an opportunity to inspire others with her learning, Ashley participates in, and has lead, multiple professional learning opportunities. She has consulted with the Perimeter Institute Advisory Team on materials designed for grade 11 Physics courses, and she has shared her learning about sequencing content and a gradeless classroom with science and non-science educators around the province at various conferences, including Bring It Together, CONNECT and Science Teachers' Association of Ontario.

She is a valuable, active and contributing member of the physics educator community.

Quebec and Nunavut / Québec et Nunavut

**NADIA RENZO**, Collège Saint-Louis

Awarded for her passion and dedication to teaching physics and her commitment to real-world physics demonstrations and extra-curricular activities.

Nadia Renzo has been teaching grade 5 physics at Collège Saint-Louis since 2008. Known for her boundless energy, boundless creativity and warm humour, she paints epic frescoes for her students as they discover Newton, Galileo and many others. A lover of the history of science, she fills her classes with anecdotes that do justice to the place of women in science, but also touch on the more human aspect of the great physicists. Far from limiting herself to theoretical speeches, this action-oriented teacher conceives ever more extravagant demonstrations, from the demonstration of Newton's three laws with Mario Kart - with competition to back it up - to her famous bowling ball on the ceiling that has become the most convincing (and feared) of clocks. By the way, don't be surprised to see her standing on her desk playing bass guitar in front of the students' astonished eyes: she is explaining acoustics.

Ms. Renzo believes that physics is part of everyday life and encourages her students to see it that way. During the final lab evaluations, they are free to do any mechanical physics experiment they can imagine. It inspires them so much that no one at Collège Saint-Louis questions it anymore when they see one of them launching a parachute from the 3rd floor catwalk with a stopwatch in hand.

And let's not forget all the extracurricular activities she leads, from the science fair to robotics to the annual rock show! Mrs. Renzo is the colorful whirlwind of the school that leads her students and colleagues on a thousand and one adventures. One thing is certain: she leaves indelible traces of her physics class in the hearts of her students, who still remember them years later.

Atlantic / Atlantique

**SHANE MACLEOD**, Dartmouth High School

Awarded for his passion and dedication to teaching physics and his development of physics teaching and learning resources.

Shane MacLeod has been an inspiring teacher for almost two decades. Every day he brings his enthusiasm for thinking and his compassion for students into his high school physics classes at Dartmouth High School. He provided glimpses into how education was affected by the pandemic through interviews with CBC. His devotion to making modern physics accessible has led him to making videos of classroom-ready resources developed by Perimeter Institute for Theoretical Physics to help teachers throughout Atlantic Canada. He has also supported teachers in Nova Scotia by presenting at the NS Science Teachers' Conference.