



Canadian Association
of Physicists

Association canadienne
des physiciens et physiciennes

Contribution ID: 4022

Type: **Plenary Speaker / Conférencier(ère) plénier(ère)**

Teaching Physics Before and After 2020

Wednesday, June 21, 2023 9:15 AM (30 minutes)

The start of the COVID-19 pandemic and the first waves of lockdowns coincided with some big changes in how we approach learning on campus. Teleconferencing used to mean an awkward and clumsy Skype call, but now zoom meetings, zoom tutorials and zoom office hours are commonplace. Accommodations for at-home learning and assessments are sometimes expected. Online assessments are notoriously untrustworthy, but they do have benefits from an equity and diversity perspective. In physics we have shown that frequent online assessments result in less of a gender-gap than traditional high-stakes, in-person exams. Bound-paper introductory textbooks were still the norm before 2020, but since the pandemic almost no first-year students purchase paper textbooks. E-books, Open Educational Resources and Online Homework Systems offer students a more animated and interactive experience, and give instructors more opportunity to customize and author content. Many amazing virtual learning experiences have been attempted recently, but are there any that are worth keeping? I'll also talk about the consequences of the recent virtual learning in high schools to physics education, and how our students have performed on pre-course physics quizzes when they arrived in the Septembers between 2012 and 2022.

Presenter: HARLOW, Jason

Session Classification: W-PLN2 Plenary Session | Session plénière - Jason Harlow, Undergrad Teaching Medal Winner