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## **Twenty Years of Innovative Physics Distance Education at Athabasca University**

*Wednesday 15 June 2016 16:00 (15 minutes)*

Although Athabasca University has offered distance education courses in many subjects for over a quarter century, twenty years ago Physics was taught by mailing out printed course materials while requiring students to physically attend onsite labs, some coming from as far away as Texas. A major increase in Physics enrollment took place after we switched to mail-out course material, with home labs using lab kits borrowed from the university library. We have progressed to a mail-out textbook with online Study Guide and Home Lab Manual, and reduced the cost of lab kits as we use modern technologies to serve nearly 500 students per year. Our latest endeavor is to move to an open source e-textbook (OpenStax College Physics) with improved online lab materials. The ubiquitous use of cellphones and the measurement capabilities they now provide allow us to envisage using only materials available in students' homes to provide a meaningful lab experience. Many of our advances have implications for campus-based institutions.

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