



Gemini-generated image of a student working online with supporting adults behind

E-Learning Research Update: An Ontario Perspective

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Introduction

In March 2019, the Ontario government announced a major reform of education, titled *Education that Works for You – Modernizing Classrooms* (Government of Ontario, 2019a), which included mandatory e-learning (or online) course requirements for graduation. That was later modified to a two e-learning course requirement, with students who entered Grade 9 in the 2020-21 school year required to earn at least two online learning credits as part of the requirements for an Ontario Secondary School Diploma (OSSD), unless they opted out or had been exempted (Ontario Ministry of Education, 2022).

Mandatory e-learning (now called online learning in Ontario) is back in the news and on social media, and much of the discourse is problematic. An ‘either/or’ argument regarding classroom versus online learning is posited while perpetuating myths about online rigour and success. Much of the discussion is based on limited studies or indirect perceptions from prior legacy distance education models that do not reflect today’s programs. In addition to this, a correlation is now being made between online learning and excessive screen time, equating active, intentional online learning with social media algorithms and “doom scrolling”. This CANeLearn¹ publication provides a summary and overview of online learning research, while addressing some of the myths and misinformation.

The E-Learning Mandate Debate

E-learning, or online learning, is not inferior to classroom learning; it is simply another place for it to occur, just as a makerspace, a library, a wood shop, or anywhere else that teachers can structure and manage learning opportunities. While the potential does exist for meeting the mandatory e-learning target of two online courses, the Ontario teachers’ union’s concerns are that the mandate is merely a cost-saving measure. This concern is based on the fact that in-person classes are funded at 23 students per teacher, while virtual classes are funded at 30 students per teacher, regardless of whether students opt out and remain in the classroom (Farhadi, 2022). While the validity of that cost concern is not ours to debate, it is often used to cast negative dispersions on online learning practices that provide wraparound support beyond just one teacher in one classroom.

¹ The Canadian eLearning Network (CANeLearn) has compiled a comprehensive understanding of the research on online learning, or e-learning, in Canada. Our compiled quantitative and qualitative research is based on independent studies, published research, and data from online learning programs and Ministries of Education.

A straight comparison between the two modalities fails to account for the other educators involved in providing online learning beyond the teacher providing direct instruction. Research has consistently found that there are a variety of teachers involved in the provision of online learning from those who develop the course to those who provide support for online learning at the local school level to those who actually teach the online course (Barbour, 2019; Borup, 2018; Davis et al., 2007; de la Varre et al., 2010, 2011; Ferdig et al., 2009). These additional educators are not involved in the in-person context, where the classroom teacher is responsible for all aspects of the design, delivery, and support of student learning. Regardless, without adequate resourcing, any learning modality – classroom or online – can be ineffective or unable to support a full range of students. Successful e-learning models favour a reallocation of resources and funding, not a reduction, but are not the same as the one- teacher one-class teaching model.

Another reason the Ontario Secondary School Teachers’ Federation (OSSTF) is calling for the elimination of mandatory e-learning courses in high schools is that the policy is inconsistent with reducing screen time and distractions in classrooms (Ismail, 2026). To date, much of the research on screen time is qualitative, based on perceptions of students, teachers, family, and/or the public at large. That body of research indicates that bans reduce cell phone usage in classrooms, but provides mixed results on their impact on academic gain (Barshay, 2026). For example, the most recent US study found that while the use of lockable phone pouches reduced phone use in classrooms, the average effect on test scores over three years was consistently close to zero (Allcott et al., 2026).

While cellphone bans in classrooms focus on mobile devices (Ontario Ministry of Education, 2025), they aim to eliminate *passive, algorithmic distractions*—such as phone scrolling, TikTok, texting, or gaming—which can affect a student’s attention span in a physical classroom where instruction takes place. Conversely, e-learning is *active, structured, and goal-oriented*, with students most often engaging with digital learning materials through laptop or desktop computers. Screen use is focused on different purposes; one is for learning, and the other is to distract from it. As well, Bal et al. (2024) found that interactive and educational screen content, such as an online course, may positively influence development and executive functions when aligned with recommended screen time guidelines. While the research on the screen time effects of online learning is inconclusive, there remains a fundamental difference between a phone that distracts a student from learning and a computer that educates them.

Is E-Learning Inferior to the Classroom?

One of the more enduring myths about online learning is the comparative efficacy of online learning to that in traditional classroom settings. Most meta-analyses support the conclusion that online learning has the same or better effect on measures of student academic achievement when compared to traditional instruction (Means et al, 2010; Cavanaugh et al, 2004; Martin et al, 2020). For example, a detailed meta-analysis conducted by Means et al. (2013) found that, on average, students in online learning conditions performed modestly better than those receiving face-to-face instruction, while blended learning (a mix of online and face-to-face) had a distinct performance advantage over face-to-face and online classes. The

online modality has been consistently shown to be an effective learning environment, and no less rigorous than the classroom.

Why is E-Learning Important?

The modern workplace, and most colleges and universities in Canada, regularly use online digital tools and courses in addition to face-to-face interactions and environments (Bush, 2026). Remote work, digital project management, and virtual collaboration are standard realities (National Research Council, 2012; OECD, 2026; World Economic Forum, 2023). Can you imagine a workplace without screens? Leaving high school without learning to navigate a digital environment puts students at a tremendous disadvantage when entering workplace environments or postsecondary institutions, where online courses are increasing in numbers (Johnson et al., 2023). Learning to navigate a digital environment is a mandatory requirement for the 21st century workforce, not to mention an important factor for student choice and equity of access to learning (Nakunsong, 2024; Kingsbury & Marshall, 2023). E-learning bridges this gap by utilizing online access, a structured learning process, and specialized tools. A student in a small northern community has access to the same curriculum as a student in a massive Toronto high school. The screen isn't a distraction; it's a gateway to an opportunity that wouldn't otherwise exist in a school building.

Just as learning in a physical classroom requires guidance, structure, and effective processes, teaching online requires building students' skills to succeed in digital learning environments. Its overall effectiveness remains heavily reliant on specific pedagogical strategies, student self-regulation, and instructor training rather than the digital medium itself (An et al., 2021). The Ontario online learning model includes specific teacher training, critical supports in the local schools, quality online courses and resources, a digital learning platform for all students and online teachers, and offers a well-regulated and robust online learning model that has expanded online opportunities in the province. Ontario's existing model has a highly centralized system with delivery decentralized at the local level for maximum benefit (Barbour & LaBonte, 2019), with completion rates comparable to or better than classroom-based courses (up to 94% completion in some consortium models). In Ontario, or elsewhere, online learning is not inferior to classroom learning. It is simply another learning environment, but one that offers equitable access to specialized curriculum for students while creating opportunities to prepare them for the current and future workplace and postsecondary learning environments that demand digital learning skills and familiarity with the technologies that support them.

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