



School Boards—IT Systems and Technology in the Classroom

2018 Value-for-Money Audit

Why We Did This Audit

- Ontario's 72 school boards reported total Information Technology (IT) spending for the 2017/18 fiscal year of \$227.8 million.
- An assessment on the use of IT systems at school boards and classroom technology in schools, and a review of student data reporting systems, have not been performed by our Office.
- There has been an increase in cyberattacks in the education sector globally.

Why It Matters

- Access to technology in the classroom is important to about 2 million Ontario students' learning experience.
- IT systems and classroom technology at school boards enable critical business processes and curriculum delivery.
- Schools, school boards and the Ministry of Education (Ministry) host a large amount of personal information about students on their IT systems.

What We Found

- The Ministry has not developed a broad strategy for IT use in classrooms across the province or provided direction to school boards in using IT resources to deliver the education curriculum.
- The availability of tablets, laptops, computers and applications varies both among school boards and among schools in the same board. Consequently, students' learning experiences vary.
- The average age and the age range of classroom equipment vary widely across schools. Older, slower, outdated equipment can affect students' learning experience and is more vulnerable to cyberattacks.
- School boards are inconsistent in their ability to keep track of IT assets such as laptops.
- School boards each decide how much to spend on IT in the classroom. The Ministry and the school boards lack current data on equipment age and inventory to help guide their spending decisions.
- Although cybersecurity breaches have been increasing, not all boards provide formal security awareness training to their staff—to, for example, recognize emails with malware—or have cybersecurity policies.
- Although the school boards have established policies and guidelines on bullying prevention and intervention in accordance with Ministry requirements, they do not measure the effectiveness and performance of anti-cyberbullying programs.
- The Ministry has spent more than \$18.6 million on virtual learning environment (VLE) software in the past five years, which it provides for free to the school boards; however, some boards also purchase their own software to make up for gaps in the VLE software and for ease of use. The Ministry is therefore not always obtaining value for money from its IT purchases.
- Many school boards do not have formal business continuity and disaster recovery plans if a natural or man-made event were to damage the operation of their IT systems.
- The student data reporting process has inefficiencies and lacks performance targets for the preparation and submission of student data. Training and support on the system is insufficient to help resolve errors with data validation issues in a timely manner.

Conclusions

- The Ministry has no broad IT strategy for curriculum delivery, use of IT by students and administration of IT. Consequently, students' access to classroom technology varies across the province, and the age of equipment and software also varies. This could impact the learning experience of Ontario's students.
- Most school boards do not take sufficient measures for preventing cybersecurity threats and have not formally identified key IT risks.
- The Ministry has invested in classroom management software that may not meet classroom teaching needs.
- Improvements to the Ministry's student data reporting system could result in efficiencies in the student data reporting processes of school boards.