Bring Your Own Device

As mobile devices become more affordable and student ownership rates rise, an increasing number of school authorities are looking at personally owned devices and wondering how they can be leveraged for use by students to support student-centred, personalized, authentic learning as described in the Learning and Technology Policy Framework (2013).

BYOD in education offers many new learning opportunities and benefits. Several Alberta schools and school authorities that have implemented policies and practices to support the use of personally owned devices have reported increased student engagement in learning and improved inclusion. However, BYOD also requires new approaches to learning and teaching. Beyond just thinking about the technology, it is important to consider pedagogy, teacher readiness and policy.

What is Bring Your Own Device?

• The term Bring Your Own Device (BYOD) refers to technology models where students and staff bring a personally owned device to school for the purpose of learning.
• A personally owned device is any technology device owned by a student, staff or guest, including smartphones, tablets, gaming consoles and mini-laptops.

Benefits

Alberta Education led a province-wide community of practice to develop a guide entitled Bring Your Own Device: A Guide for Schools. Participants in the community of practice identified a number of benefits of accommodating and planning for BYOD:

• Student familiarity with their device: Student familiarity with and customization of devices that they already own enables learners and educators to more effectively incorporate these devices as tools for learning.
• Bridging formal/informal learning: When students use the same device(s) at home and at school, they have access to extended learning opportunities.
• Currency and ubiquity: BYOD can quickly and drastically improve student access to technology, and technology owned by students has the potential to be more current than that which can be provided by schools. Nearly ubiquitous access to very current technology supports teachers to be innovative as they incorporate technology into instructional design.
• Cost and sustainability: School technology investments can be redirected from device purchases to increasing student access to the Internet and providing technological capabilities not available on personal devices (e.g., high-end video and graphics editing).
BYOD Technology Models

School authorities can manage BYOD models in a variety of ways, ranging from high standardization (limiting devices to specific brands/models) to high flexibility (allowing any device that is Internet-ready). It is important to have a clear vision of the desired educational outcomes and design the model to achieve those outcomes, considering stakeholder input and diverse learning needs.

Challenges

School authorities that participated in the development of the BYOD guide also identified a number of implementation challenges, including:

- **Increased network traffic**: As students bring in their own devices, the number of devices simultaneously accessing the network increases significantly. School authorities need to have adequate capacity and bandwidth to support student learning with these devices.
- **Digital equity**: Not all families can afford personal devices or Internet access at home. Ensuring digital equity can include access to devices and the Internet, as well as access to resources and quality learning opportunities.
- **Responsible/Appropriate Use Agreements**: It’s important to ensure that BYOD is addressed in student and staff use policies.
- **Pedagogy/Teacher Readiness**: It is important, prior to and while implementing BYOD programs, to provide professional development for teachers, time for staff to redesign learning and support for programs that build digital citizenship.

While the challenges may be daunting, school authorities participating in the development of the BYOD guide generally found them manageable.

BYOD and Your School Authority:

Some key questions to consider if you are interested in implementing BYOD:

- Which stakeholders should be involved in creating a vision for using BYOD models for learning at your school authority and in identifying the desired outcomes?
- What BYOD model or combination of models would work best for your school authority?
- What does equitable access look like in your school authority? How can your school authority ensure equitable access for your students?
- Are educators prepared to incorporate BYOD into pedagogy? What will they need to navigate this change successfully?
- Does your school authority’s Responsible/Acceptable Use Agreement specify expected behaviours and the consequences for inappropriate use?

Next Steps

- Discuss the above questions with other senior leaders in your school authority.
- As a leadership team, review the Bring Your Own Device: A Guide for Schools document. It contains a framework for assessing school authority readiness (Section 8) and outlines critical steps in preparing to implement a BYOD model.