

Challenges of BYOD

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Although there are many benefits to implementing a BYOD program, it is not without its challenges as well. Consider the following BYOD challenges and questions:

Mobile Devices

Although mobile devices offer many advantages, such as anytime—anywhere learning, there are times when students will require a “real” computer. Many software programs require a computer with a file structure and mouse input, even if they offer a companion mobile app to supplement the software program. Not all software features and file types are supported on mobile devices.

- What will students use when they require a keyboard?
- How will students use software programs that require a “real” computer?
- What will students use when they need a larger screen?
- How will students access files that are not supported on their mobile device?

Logistics

There’s much more to BYOD than simply allowing student devices at school. Device considerations and logistical planning requires both time and energy from school staff.

- Will students be responsible for keeping their devices charged? How/where will students charge devices if needed?
- How will devices be secured when not in use, for example during lunch, tests, or sports?
- What about students without devices? How will students check out a loaner device? How long will they be able to keep it? Can they take it home?

Security

BYOD brings with it a host of security concerns, including data protection and compliance with the Children’s Internet Protection Act (CIPA).

- How will you protect student information and avoid data security conflicts?
- How will you protect your network from viruses and malware?
- Will students be protected from unsolicited email and inappropriate sites?
- How will you monitor Internet usage?

Network Infrastructure

Opening school doors to student and staff devices will create heavy demands on your network infrastructure.

- Will the network be able to handle large a number of devices simultaneously, for example, at the beginning of class periods when students log on to the network at the same time?
- Will students be able to rely on network access 24/7?
- How will you ensure enough bandwidth to handle multimedia applications?
- Does your network infrastructure have the capacity for growth?

Curriculum

A BYOD program requires a significant amount of curriculum analysis and redesign in order to take full advantage of mobile device features. Teachers may say they are on board for BYOD, but they also need to be aware of the impact it has on their teaching approach. BYOD also requires a school to rethink its digital citizenship curriculum.

- How will teachers be supported with BYOD implementation? How will they learn about new software applications and devices?
- Do students know about netiquette and internet safety? Who will be responsible for teaching this?
- What about teachers who choose not to participate in BYOD?

Communication

Implementing a BYOD program requires time and energy devoted to maintaining ongoing communication between district administrators, staff, parents, and students. If a mobile device is purchased, maintained, repaired, and managed by parents and students, it's going to be important to communicate well and communicate often.

- Do you have the support and buy-in from all parties involved?
- Are parents involved in the planning and decision making process? How will they continue to be involved in the program?
- Do parents know how the devices are being used at school? How can they follow-up at home?

Budget

At first glance, a BYOD program may appear to save money by passing the cost of devices on to parents. However, there are many costs associated with BYOD implementation that must be considered.

- What needs to be done to update the network infrastructure? How will you ensure that students will have reliable, fast network service 24/7?
- How often will you update the network to maintain its viability?
- How many loaner devices will you purchase? How often will they be replaced? How will you pay for repairs?
- Mobile devices are designed to supplement, not replace, the work done on “real” computers. How many computers will the school purchase? Where will they be located?
- Will you have mobile device charging stations? How will that impact the school's energy budget?