### 10 THINGS TO KNOW before starting a BYOD PROGRAM



#### FACTS ABOUT TEENS AND TECH

## Students ages 12–17 who own or have access to a computer

71% use the computers that are used by their families. Almost 30% also have their own tablet computers.





Students ages 12–17 who own their own personal cellphone by age 17

In addition, almost half (47%) of the phones used are smartphones, compared to only 23% in 2011.

## Students ages 12–17 who access the Internet on a daily basis

Source: Pew Internet Research

74% of these students also claim they access the Internet from their cellphones or tablet computers.





#### BYOD AROUND THE WORLD



#### Springbank School, Calgary CAN

Launched 1:1 laptop program in 2010 and currently serves a network of 800+ teacher and student users

#### GEMS International School, Dubai UAE

Part of GEMS education network—implemented a BYOD program in 2013 across all their UAE schools, which was the first in their region

#### Forsyth County, Georgia USA

BYOD program implemented in 2009 with 7 schools, and now includes all 36 of their schools

#### Kristin School, Auckland NZ

School with a successful mobile technology program— BYOD iPad program used with Year 5–6 students, and is being extended to Year 4 students in 2015

GEMS



#### WHY BYOD?

As schools aspire to align with modern digital practices, one of the most appealing programs for many is BYOD (Bring Your Own Device). It's a program that encourages students to harness the power of their own personal mobile technologies to enhance their learning experiences. BYOD programs can become very successful if properly implemented and maintained. But how do you get started?

The idea behind a successful BYOD initiative rests in the old boy scout motto of "Be Prepared," which is exactly what this ebook is designed to do for you. Here you'll find 10 key things to consider before going ahead with your own BYOD program. As each point is covered, you'll have the opportunity to consider important questions about where your school is at with BYOD readiness, and where you'd ultimately like to be.



#### A CLEAR VISION

Before you, your school, or your District begin this new venture, you need two things. First, you need to know where you are now; and secondly, you need to know where you want to be. This is where you start with the end in mind.

Often BYOD and one-to-one programs are not learning initiatives; they are technology initiatives. The fundamental question we ask when facilitating this process is *what are the learning outcomes that you are trying to achieve that require this shift in technology?* 

Moving to a BYOD environment in your school has the potential to be a joyful and rewarding journey for teachers and students alike. It can also be one plagued with frustration and setbacks if you aren't prepared.

Be sure you know where you are now, get a clear picture of what you want your BYOD program to be like, and establish the route you want to take to make it a reality. From there, you can begin to determine what you'll need to make it happen—you might find you already have more than you need to get started!



What is your vision of what you want your ideal BYOD program to look like?



#### A FINANCIAL PLAN

Funding and other financial considerations are a vital component to initiating a BYOD program. Consider who would be the main funders of the program, including parental funding. Perhaps your school may want to lease equipment for meeting equality of access objectives. What would be best and most feasible course of action for your school?

In addition to this, think about where else you'll need to allocate funds. This would include everything from selecting your network service provider, to either employing or training current personnel to act as tech support, updating your school's facilities, and more. Be sure to investigate every possible circumstance for which financial expenditure will be required, either one-time or on an ongoing basis. It's also a good idea to check out where you can save money for using elsewhere.

What are the current options that are available to your school for funding a BYOD program?

#### **TEACHING / ASSESSMENT VISION**

In a BYOD environment, students use their devices for everything—online research, ethical image searches, and answering test questions via clicker apps or social media; all the way up to designing websites, blogs, and creating and editing audio and video projects. As such, methods and practices for teaching, learning, and assessments will undergo some changes for the teacher as mobile technology is blended into their classroom. Even so, it's important to remember that the technology is meant only to support and to enhance learning, and not replace the teacher.

In a modern learning environment, the technology is used by the students to create products that demonstrate their understanding of the learning in any way that speaks to them. Much of the work we do in schools is to assist teachers in this pedagogical transformation from teacher-based instruction to student-created learning. Any technology infusion in learning should be done in order to improve students' skills by being aligned with intended learning outcomes. The focus is always on the learning first, and never on the technology.



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How would teaching practices change with students who are using mobile devices?



How would you employ global digital citizenship practices with students in your own classroom?

#### A GLOBAL DIGITAL CITIZENSHIP PROGRAM

A successful BYOD environment includes a strategy to address the crucial aspects of what it means to be a global digital citizen. This kind of program goes far beyond offering basic acceptable use agreements and establishing simple guidelines.

Implementing a complete and comprehensive Global Digital Citizenship program with your BYOD initiative works with mobile technology to transform students into responsible and ethical citizens. It moves learning from being a culture of dependence to one of independence, and establishes a global mindset. Most of all, a Global Digital Citizenship program teaches students to practice respect and responsibility for themselves, for others, and for properties both physical and intellectual—all while making learning fun and adventurous.

You can learn more about the program offered by the Global Digital Citizen Foundation at globaldigitalcitizen.org.



#### NETWORK AND SUPPORT

As the surge of technology increases in the BYOD classroom or school, so will the need for an updated network with reliable Internet access. This means bandwidth, bandwidth, and more bandwidth! It's a great idea to look into what packages and options service providers are offering. Remember also that this wireless capability will need to be synced across all devices being used.

Do you foresee lots of streaming and downloading data for lessons and projects? What about communication networks and social media access? Is your school planning on using specific productivity suites of tools or cloud computing services? Be sure to take all these things into account when assessing your overall network needs.

Ongoing support is another key consideration for a new infrastructure, since your school network will need to be maintained. This involves mapping out how to provide a system of effective tech support, training, and professional development for any staff acting as tech leaders or consultants. Having solid support is vital to the continuing success of your BYOD program.



How will mobile devices be used in a BYOD setting in your school, and what kind of network would support this adequately?



#### SECURITY AND PROTECTION

Students will be using the Internet to do research, stream video, and download resources for their various projects, so you'll need adequate security measures along with protection for data and stored information. It's a good idea to have all the authorized mobile devices on your network cleared for use by the IT department, and ensure that they follow some kind of compliance code for usage.

A filtered access system ensures students aren't visiting sites that are inappropriate or unacceptable while working in school. Consider options for antiviral software and security programs, as well. Students will also want both their devices and their stored information protected—insurance coverage to protect students' equipment against theft and accidental damage is always a good idea. If the students (or parents) will be paying for these options, you may be able to get discounts with companies who provide such programs and services, and the school itself may even agree to cover a percentage. This kind of approach encourages students to practice a measure of responsibility for their property without having to shell out too much money to do it.

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How would security and protection measures best be utilized for a BYOD program in your school?

#### **RETHINKING THE ENVIRONMENT**

You've got to look at the structural, mechanical, and electrical capacity of your school and its classrooms. How well would they all work together to support a BYOD initiative? How would these physical aspects of your school change in order to accommodate your intended program?

The answers to this question vary from school to school, since each one is structurally unique in its own way. In the case of your own school, these things may not change much at all. On the other hand, it may call for some redesigning. Some things that may need updating might be associated with electrical infrastructure, network capability, heating, lighting, and proper ventilation. The best modern learning environments that support technology should also be designed with collaboration in mind. What kind of interior design ideas would promote teamwork, with ample space and comfortable surroundings?

Think about how the amount of new technology flowing in as part of BYOD program will take up space and how that space can be maximized efficiently for the benefit of everyone. After all, in a shared space like the one in your classroom or school, everyone works and learns together. How could the structuring of your classrooms and your school be changed or updated to work for a BYOD program?



What do you feel are the best hardware and software choices for your school's potential BYOD program, and why?

#### CHOOSING SUPPORT HARDWARE / SOFTWARE

Equality of access means the possibility that not every student will have their own tech to use. In that case, your school will need to determine if they are able or willing to provide a certain amount of backup hardware choices so that every student can have technology for learning enhancement. Building feedback tools such as surveys to collect information will help you get a clear picture of what needs to be provided, and the cost can be determined from there. Depending on who your technology is coming from, you might be able to negotiate discounts on larger hardware purchase orders.

In terms of software, you may need universal programs for student and teacher use, along with specific software or apps for certain departments or subjects. Also, does your school like to look through Windows, or do you prefer to enjoy Apples? Choosing the best operating system for your school's BYOD needs will be essential, so consider this carefully.



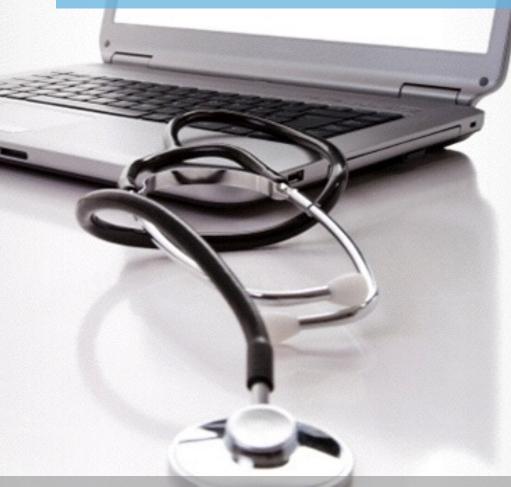
#### TRAINING

Schools will need tech leaders whom others can turn to for guidance and counselling on technology usage when it comes to BYOD practices. Having a reliable team of people trained in the practices of using and maintaining educational technology will make all the difference in your program.

Your tech trailblazers will be tasked with guiding everyone safely through the continuous questions and concerns about your new BYOD environment's chosen tools and programs. Specialized training in the mobile technology your students bring to the school may be necessary, or you can call on resources you might not have known you had. Put feelers out among your personnel and ask all the tech-savvy individuals among you to come forward and offer their expertise and insights. You may even choose certain students to be tech leaders, since they are already well-versed with the tools being used by their peers.

Another thing to keep in mind is that echnology always changes. New features and updates are added, new apps are developed, and new designs come to the forefront regularly. In that sense, tech training and all other BYOD-associated professional development will be ongoing, and must always be aligned with current mobile technology trends. Who could be a tech leader in your school, and what would they add to a BYOD program in terms of experience and expertise with technology?

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#### PARENT COMMUNICATION

Parents always appreciate being kept appraised of what is happening in their children's school lives, and many are interested in getting involved with the school in positive constructive ways. Implementing a BYOD program will mean direct communication with parents about what the program will entail, and the responsibilities both they and their children have in being a part of its success.

One of the things parents should be informed about is how the technology will be used specifically in the BYOD program. They want to know their kids are in a safe environment when they are at school, and online environments are no different in that regard.

Establishing a policy of ongoing communication involving regular updates via electronic newsletter or through a school blog or website are great options for keeping parents consistently informed. You can also encourage parents to get involved in the BYOD program somehow. You'll find that many are happy to become part of the action and contribute many different things.

**10** How could parents become involved in a BYOD program and stay informed on how the program is working?

#### SUMMARY

The ten points we've just covered are ones for you to carefully consider prior to adopting a BYOD initiative in your school or in your District. The questions offered with each section are ones that should be discussed collaboratively and openly with your colleagues in preparation for moving your program forward. By doing so, you'll uncover many things that would help make the transition to BYOD practices in your own school or District a lot smoother.

Now that you've got your eyes on BYOD, are you ready to take the next steps? We can certainly help you out, so don't feel overwhelmed! We've assisted schools all over the globe in making the shift to modern teaching, learning, and assessment practices that focus on creativity, compassion, and a clarity of vision for students' successful futures. We'd like to help you do the same.

The Global Digital Citizen Foundation offers services designed to help educators and their districts make professional transformation a reality in their schools. If you have a vision of where you want to be, we can help you get there. And even if you don't, then we can help you find it!

Connect with us on our website for information on how you can move forward with your own BYOD program.





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