BYOD

Bring your Own Device Handbook

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TECHNOKids® Learning Tool

Contents

How Can I Use this Handbook?

This handbook includes articles about BYOD and student learning, teacher practice, classroom management, and frequently asked questions.

In addition, it includes a sample BYOD policy, parent letter, and consent form. Adapt these materials to suit your purpose.

You can use the BYOD handbook in the following ways:

- Information Night: Explain how BYOD can improve learning.
- Parent Handbook: Staple together the parent letter, with frequently asked question, policy, and consent form.
- Teacher Workshop: Use the teacher practice, classroom management, classroom rules, and teacher frequently asked questions sections to support professional development.
- Supplement Policy: If a policy has already been established, pair it with the frequently asked question document for parents

What is BYOD?

BYOD or _Bring Your Own Device_ is a policy that allows students to bring their own computing devices, such as smartphones, laptops, e-readers, tablets, or other mobile gadgets, to school for use on the school's network. Sometimes, BYOD is referred to as BYOT or _Bring Your Own Technology_. This term is used to shift the focus away from the hardware to one that encompasses the range of resources offered by a device.

Does it Really Matter What Term is Used?

Yes. It is a good idea to use a term that people will recognize. According to Google, 97% of all searches use BYOD[1]. In addition, the BYOD acronym is commonly used in the workplace and by local school boards[2]. For these reasons, BYOD is recommended.

BYOD and Policy Name

When communicating with teachers, parents, and students it is suitable to use the term, _Bring Your Own Device_ (BYOD) when discussing the initiative. However, in the actual policy document you may wish to use a generic title such as _Personal Communication Device_ policy, _Mobile Digital Device_ policy, or _Electronic Device_ policy. This can give the policy longevity since it is not associated with a catchphrase.

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[1] BYOD 165,000 global searches per month; BYOT 5,400 global searches per month.

[2] In Ontario, local school boards are using the term BYOD when communicating with students, parents, and teachers (Peel, Hamilton Wentworth Catholic) however, often in their policy documents they will use a generic term such as _mobile digital devices._

Does Our School Need BYOD?

Very few people would debate the educational value of technology upon learning. However, students already have access to school owned technology through mobile carts and scheduled computer lab times throughout the week. A reasonable question to ask is *why does our school need BYOD*?

Here are ten reasons your school needs BYOD:

1. Allocates Financial Resources Elsewhere

   BYOD shifts the financial responsibility of purchasing and maintaining technology to parents. This results in significant savings from reduced hardware and software costs. In addition, BYOD allows schools to make e-books available to students, which are less expensive then the printed version. This frees up money to be allocated elsewhere within the school.

2. Integrates Technology Seamlessly into Curriculum

   Mobile carts or scheduled computer lab time are restricted to booked time slots. This limits education opportunities. To create an optimal learning environment in all subject areas, students need ongoing access to technology throughout the school day.

3. Creates 1:1 Student to Device Ratio

   Budget constraints prevent a school from providing each student with their own device. BYOD creates a one device per one student ratio (1:1) that is maintained throughout the school day. The 1:1 ratio produces a student-centered environment that improves learning.

4. Provides Access to Up-to-Date Technology

   Technology is continuously evolving. A school has an inadequate budget to keep up with the pace of change. BYOD is an effective way to ensure that students have a current device. This is important because the majority of jobs today require technology skills. In addition, new career opportunities are constantly developing. Consider that ten years ago the following jobs did not exist: apps developer, professional blogger, social media manager, cloud computing consultant, or search engine optimization specialist. By the time a student graduates from high school there will be even more jobs that are new as a direct result of technology advancements. It is essential students have up-to-date technology to prepare for work in a high-tech, global economy.

5. Allows Students to Personalize Device

   A school owned device cannot be customized per user. However, different learners have different needs. With BYOD, students can select the device they use for learning based on personal preference. Furthermore, they can customize the settings to make it easier for them to use. This increases their comfort level and confidence. As well, students can install their own applications allowing them to use programs that best suit their needs. This can benefit everyone, but especially English as a Second Language (ESL) and special needs learners, who may require specialty software or custom dictionaries.

6. Fosters Any time, Anywhere Learning

   School owned devices typically do not go home with students. With BYOD, the gadget belongs to the students, allowing them to take it anywhere. This extends learning beyond the walls of the classroom.

7. Promotes the Use of Innovative Teaching Methods

In some schools, everyone uses the same device. This can create a situation whereby everyone does everything the same way. However, with BYOD there are numerous devices. This diversity encourages teachers to incorporate innovative teaching practices, instructional materials, activities, assessment tools, and communication methods.

8. Enables the Use of Digital Instructional Materials

When students have their own device, it makes it possible for teachers to integrate the use of digital instructional materials into learning more frequently. For example, they can increase their use of e-books, online content, video, drill and practice games, simulations and more to teach concepts. This improves the relevance, timeliness, and interest in curriculum.

9. Improves Communication

BYOD gives each student the capacity to communicate with parents, teachers, administrators, peers, community members, industry experts, and others using email, chat, blogs, and other technology throughout the school day. Improved communication enhances learning.

10. Transforms Student Learning

Ongoing access to technology throughout the school day transforms the classroom into a student-centered environment. This promotes innovative teaching practice and access to digital instructional materials that improve learning. BYOD can increase students' ability to collaborate, transfer learning, work independently, be responsible, use technology competently, apply higher order thinking skills, express creativity, and act as digital citizens. These skills are all necessary to thrive in the 21st century.

BYOD Improves Learning

Students having their own computing device throughout the school day transforms learning. With BYOD in place, a teacher can incorporate new teaching practices, instructional materials, activities, assessment tools, and communication methods that were previously not possible. This change has the capacity to alter dramatically student experiences. Discover the educational value of BYOD and the ways in which this policy can improve learning.

Did you know? BYOD:

- ✓ fosters collaboration
- ✓ develops higher level thinking skills
- ✓ advances the transfer of learning to new situations
- ✓ supports self-directed learning
- ✓ develops digital citizenship
- ✓ encourages responsibility
- ✓ improves student engagement
- ✓ increases expertise in using technology
- ✓ amplifies creativity

Fosters Collaboration

Collaboration is a process where two or more people work together to reach a common goal, and it is prevalent in the workplace. Mobile devices make it easier for students to cooperate in partners, small groups, or as a whole group. They can use digital tools to acquire information, exchange ideas, share resources, and jointly create original works. Working together benefits students as they can build on team members' abilities and interests. As well, collaboration promotes participation, fosters responsibility, improves social skills, and prepares students for the future.

Develops Higher Level Thinking Skills

Higher order thinking engages analysis, evaluation, and synthesis skills to create new information that requires more cognitive processing than lower order thinking which is limited to the recall, comprehension, and use of information. BYOD provides ongoing access to digital tools that can process information in a more complex manner. For example, the creation of flowcharts, surveys, simulations, digital stories, and blog discussions are just some of the ways technology can develop higher order thinking in students.

Advances the Transfer of Learning to New Situations

A transfer of learning happens when knowledge or skills acquired from a previous experience are applied to a novel context. Much of the school day is compartmentalized into segmented subject areas, often with the content being taught by different teachers. Mobile devices make it possible for students to apply the same digital tools to new tasks, thus encouraging a transfer of learning. As well, teachers are able to take advantage of the technology to adopt an interdisciplinary approach. An interdisciplinary approach connects learning objectives from two or more academic fields of study. Having a mobile device gives students access to resources that combine knowledge and skills from multiple subject areas such as language arts, mathematics, geography, history, science, and social studies. This encourages the transfer of learning to new situations.

Supports Self Directed Learning

Self directed learning is when students are able to independently undertake a task and make judgments without the direction of a teacher. Working independently can often be challenging, even for the brightest students. However, having their own device motivates students to take control of their learning. This is because it provides them with apps to plan and organize ideas, monitor progress, and carry out the assignment with the teacher assuming the role of a facilitator. BYOD promotes greater independence.

Develops Digital Citizenship

Digital citizenship is norms of responsible behavior related to the appropriate use of technology. It encompasses digital literacy, ethics, etiquette, and online safety. BYOD requires students to take ownership for their behavior and monitor their online reputation. This is an important aspect of participating in today's world.

Encourages Responsibility

Responsibility involves being personally accountable and answerable for one's actions and decisions. In one way, having a mobile device reduces responsibility. For example, required assignments, student files, e-books, instructional materials, and apps are typically stored online making it difficult to forget these items at home or school. However, BYOD introduces new responsibilities. Students must have a device in good working order to access online resources. Moreover, they must be vigilant in its care to make sure they have it each day. This requires them to charge it, transport it safely, and protect it from theft or damage. Students are likely to be more responsible when the device is their own, in comparison to when it belongs to the school.

Improves Student Engagement

Engagement happens when a student becomes actively involved in learning demonstrated by their willingness to participate, focused attention towards the task, persistent efforts despite challenges, and pride in their accomplishments. Students like using their mobile devices and this often results in an increase in engagement towards school related task that have a technology component. In addition, since BYOD also encourages innovative teaching practice, it means that the delivery method of instruction and assignments are more relevant, which further motivates students to engage. Students who are engaged are more likely to be successful learners.

Increases Expertise in Using Technology

Having a mobile device to use every day for learning is one way to develop strong technology skills. Increased access allows students to gain expertise in their ability to use productivity tools competently. However, another advantage to BYOD is the benefit that comes from the exposure to a range of devices. Diversity increases students' exposure to different types of hardware and software. Instead, of a homogenous learning environment, students are exposed to laptops, tablets, smartphones, and more! This variety helps them to understand which device or app is best suited for completing a task. As well, it forces them to learn how to adapt their particular device to meet the learning objectives. This develops essential skills that are beneficial in the 21st century.

Amplifies Creativity

Creativity is the use of imagination to develop original ideas, products, or solutions. BYOD boosts creativity because technology provides access to information, perspectives, and media that were previously unavailable. Mobile devices encourage students to use digital resources in novel ways. In addition, since technology evolves, students are continually discovering new avenues for creativity.

BYOD Enhances the Learning Environment

Students having their own device throughout the school day enhances the learning environment. This is because it allows teachers to incorporate new teaching practices, instructional materials, activities, assessment tools, and communication methods. With BYOD, teachers can:

- ✓ develop inquiry-based learning opportunities
- ✓ design innovative learning opportunities
- ✓ increase access to information
- ✓ provide timely feedback
- ✓ adjust instruction using flexible grouping
- ✓ promote blended learning
- ✓ facilitate a student-centered environment
- ✓ differentiate instruction in a more manageable fashion
- ✓ add relevance to learning
- ✓ improve communication
- ✓ invite parent involvement
- ✓ generate an authentic audience

Develop Inquiry-Based Learning Opportunities

Inquiry is the search for knowledge or truth by asking questions, examining facts, and synthesizing the information. It often includes an investigation into a problem to discover viable solutions with the search guided by a series of questions. BYOD provides students with productivity tools that aid in inquiry based activities. For example, they can use the technology to access information, analyze data, and summarize findings. Using a problem-solving model is a great way to engage learners.

Design Innovative Learning Opportunities

BYOD presents teachers with an opportunity to incorporate innovative teaching practices, instructional materials, activities, assessment tools, and communication methods that were previously not possible when access to technology was limited to scheduled computer lab times or booked mobile carts.

Increase Access to Information

Timely access to information improves learning. BYOD give students the ability to connect instantly to online resources that can help them develop understanding, complete a task, or solve a problem. Web based content also allows students the ability to access essential files from anywhere at any time using their device.

Provide Timely Feedback

Feedback is a response to an activity that provides information about the effectiveness of the effort. It is one of the most powerful influences on achievement because it helps the learner adjust their actions to get a better result. Feedback can come in the form of advice, praise, and evaluation. BYOD allows teachers to use digital tools to improve the timeliness of their feedback. For example, electronic surveys and polls instantly tally results; online quizzes can be graded by the computer and the results automatically emailed to the student with the correct responses beside each incorrect answer; and drill and practice apps can immediately show the correct answer and adjust questions to suit the user.

Adjust Instruction using Flexible Grouping

Flexible grouping is an instructional strategy used to organize students as a whole class, small groups, or partners, according to specific goals, activities, and individual needs. BYOD allows teachers to use digital tools to shift students seamlessly from one grouping situation to another. Team members can connect virtually which limits the disruption caused from having to move physically. This encourages teachers to design lessons and projects that have a collaborative component and to adjust groups often.

Promote Blended Learning

Blended learning combines face-to-face instruction with computer-mediated activities that give students some control over the time, place, path, and/or pace of learning. Online content supplements classroom instruction by providing ongoing access to digital resources such as videos, calendars, quizzes, surveys, e-portfolios, and assignments. BYOD allows student to use their device to review concepts, stay organized, show what they have learned, submit assignments, track their achievement, and communicate with others at anytime from anywhere. Blended learning creates a classroom without walls.

Facilitate a Student Centered Environment

Student centered learning is an instructional approach in which students influence the content, activities, materials, and pace of instruction. The focus is upon students' needs, abilities, interests, and learning styles. BYOD encourages teachers to create a student-centered environment because there is no homogeneity in the students' owned devices or apps in the classroom. To integrate technology effectively into curriculum, activities need to be open-ended, and the teacher must shift from direct instruction to guided instruction by becoming a facilitator. A student centered environment increases engagement, which improves learning.

Differentiate Instruction in a More Manageable Fashion

Differentiated instruction supports individual differences in learning by adjusting the pace, content, assignment, materials, and assessment measures to accommodate each student's unique abilities, needs, interests, and learning styles. It is a challenge for teachers to accommodate all learners. BYOD makes differentiated instruction easier because students can personalize their learning experiences by customizing their device or installing specialized apps to meet their needs. As well, there are drill and practice apps that will automatically adjust the subject matter, rate of information, feedback, and guidance given to each user. In addition, there are digital instructional materials (e-books, audio books, videos) that offer students a choice about how they want to access information. As well, productivity tools allow students to select how they want to demonstrate their learning such as through a written report, podcast, or blog post. BYOD makes differentiating instruction more manageable.

Add Relevance to Learning

Relevance establishes a meaningful connection between learning and the student. It is one of the most important means of intrinsically motivating learners. Students enjoy using technology and they frequently use devices outside of school for entertainment or communication purposes. BYOD makes learning relevant because it extends the use of the student's device or apps to schoolwork. In addition, BYOD establishes both personal and real-world relevance through student-centered learning, inquiry based projects, and differentiated instruction.

Improve Communication

Communication improves when students have ongoing access to technology throughout the school day. BYOD makes it easier for students to share resources or exchange ideas between peers, teachers, administration, parents, community members, experts, or people in the global village. This is because it offers apps that simplify sending messages, scheduling events, setting reminders, and collaboration.

Invite Parental Involvement

Parents are key stakeholders in education and their involvement is linked to greater student achievement. BYOD uses web apps that invite parents to engage actively in learning by sharing information, encouraging audience participation, or by exchanging ideas. For example, online learning management tools, such as Edmodo, offer membership into the school e-community to help parents stay informed about classroom activities, assignments, grades, and school events. Alternatively, blogging services, such as KidBlog.org have parents become subscribers that can read/comment on student posts.

Generate an Authentic Audience

An authentic audience is a real group of people that will view student work, such as peers, parents, community members, experts, or e-pals. BYOD offers access to digital tools that allows students to expand the audience from just the teacher. Technology allows them to express their ideas publically by posting content online to web pages, blogs, social media, or other services. This engages learners as it makes a task more relevant and personally meaningful.

Maximize the Opportunities BYOD Presents

For years, teachers have been integrating technology into curriculum. They are well versed in how to use hardware such as scanners, digital cameras, video cameras, electronic whiteboards, digital projectors, and more. They know how to design engaging lessons that use word processing, spreadsheet, presentation, database, and photo/video editing tools. They are familiar with drill and practice games, electronic simulations, learning management systems, and web-based apps. They know how to infuse digital instructional materials such as e-books, online content, and videos into the learning experience.

This raises the question, *"If teachers are already integrating technology into curriculum why will BYOD transform teaching practice? Can teachers not just keep doing what they are already doing?"*

Yes, teachers will be able to continue to do much of what they have already done in the past. However, in some cases there will be a need for change. Now that students can bring his or her own device to school, this opens up new opportunities that were never before viable.

How these possibilities take shape requires flexibility. Not every student will have a device. In addition, the devices that students bring to school will vary and the software that is available on each gadget will be different. This creates a unique set of challenges.

How can teachers maximize the learning opportunities BYOD presents?

- ✓ use web apps to create consistency
- ✓ form collaborative teams to take advantage of the range of devices
- ✓ incorporate mobile technology into school events
- ✓ digitize note taking
- ✓ enhance existing activities with technology
- ✓ design innovative new technology-based activities
- ✓ acknowledge digital citizens
- ✓ create a team of in-house experts
- ✓ maintain an equitable learning environment

Use Web Apps to Create Consistency

Web apps are applications that are accessible by users through the Internet using a web browser. In a BYOD environment, it is a good idea to use web apps because they create consistency. The device no longer matters, because everyone can use the same application to complete his or her work.

Form Collaborative Teams to Take Advantage of the Number and Range of Devices

Not every student will bring his or her own device to school, and those that do will have a range of hardware and software. To maximize the opportunity divide students into collaborative teams. Teams can be based on pairing device holders with non-device holders, producing homogenous groups of devices, or creating heterogeneous groups of devices. Together, teams can take a survey or poll, complete a quiz, or post a joint response. Please note the student who owns the device is the only one that can touch it.

Incorporate Mobile Technology into School Events

Encourage students to use their devices at school events, such as field trips, open houses, or assemblies. This will allow them to use their technology for more than completing class assignments. For example, take photos for a report about a school outing, post QR codes as a part of an exhibit, or complete a poll to engage audience participation.

Digitize Note Taking

Don't waste time having students type notes. Have them pay attention and participate in classroom discussion and activities. Notes can be obtained by posting them online or by students taking a photo of the board.

Enhance Existing Activities

Many activities that are paper and pencil tasks can be digitized. Students can use their devices to conduct online research, take notes, organize events using an e-calendar, schedule reminders, or produce digital content.

Design Innovative New Activities

Take advantage of the technology that is now available to students. Create optional activities that BYOD holders can complete as part of a unit such as electronic portfolio, video recording, podcast, digital story, e-book, blog, digital journal, or simulation.

Acknowledge Digital Citizens

Digital citizenship is norms of responsible behavior related to the appropriate use of technology. It is an important aspect of participating in today's world. Produce a digital citizenship award and use it to acknowledge students that exhibit digital literacy skills, exercise ethical online behavior, demonstrate etiquette, and practice online safety. Print a certificate or post a digital badge to a school website, classroom web page, or student profile to showcase their achievement.

Create a Team of In-House Experts

Empower your students by having them assist peers with IT questions. Produce a bulletin board. Use it to identify students that are experts with using various apps. When a student needs help, they can then go and ask a friend. Please note, assistance should be limited to how to use the app. Peers should not install software on another students' device nor alter device settings.

Maintain an Equitable Learning Environment

Participation in a BYOD initiative is voluntary. Teachers must maintain an equitable learning environment. Students without devices should not be penalized. Always design assignments that include both a paper/pencil task and a digital option. If an assignment must be completed using a computer, provide access to technology by scheduling computer lab time, booking a mobile cart, or using a lending library. Be flexible in how students complete assignments as software availability will differ.

Web Apps for a BYOD Environment

Having different devices can present a challenge when planning lessons, designing activities, and assessing learning. At some point, a teacher needs consistency. Web apps allow everyone to use a different device to access the same online application.

There are many web apps to choose. Some web apps are free, whereas others have user fees. Some web apps are accessible to any user, whereas others require registration using an email address. The status of web apps tends to change frequently, so it is a good idea for teachers to verify their accessibility prior to using them as part of a lesson.

Finding high quality web apps can be time consuming. Refer to the list of popular web apps. For each there is a description, URL, suggestions for use, fee structure, and registration requirements. Please note, the range of web apps is extensive and this is just a tiny snapshot of the possibilities.

Blogging

Description	Create a web-based publication consisting of short articles posted in reverse chronological order.
URL	http://kidblog.org
Activities	Aside from blogging about a topic of interest, students can use their blog to write reading responses, record a digital reading log, produce a school/class newspaper, discuss current events, engage in joint serial writing, solve brainteasers, post video tutorials, reflect upon learning, maintain a science fair diary, write a research series, or communicate with e-pals.
Fee	It is free for 30 days. Yearly subscription is less than $40 per teacher.
Registration	The teacher must register for an account. They can then create a class of students and set the username and passwords for each user.

Digital Storage

Description	Store files online for easy access. Popular services include Dropbox, OneDrive, and Google Drive.
URL	http://www.dropbox.com, http://onedrive.live.com, http://drive.google.com
Activities	Use online digital storage to store and share files such as photos, videos, forms, presentations, policy documents, assignments, or other handouts.
Fee	It is free!
Registration	Users require an email address.

Google Web Apps

Description	Create documents, presentations, spreadsheets, forms, drawings, and more using free online productivity tools.
URL	http://drive.google.com
Fee	It is free!
Registration	Users require a Google Drive account.

OneDrive Office Web Apps

Description   Create documents, presentations, and spreadsheets using free online productivity tools.

URL   http://onedrive.live.com

Fee   It is free!

Registration   Users require a Microsoft account.

Edmodo

Description   Create an online community by setting up a class and then using digital tools to post messages, alerts, assignments, quizzes, polls, and library resources to members.

URL   http://www.edmodo.com

Activities   Manage your classroom by having all students become members of the community. Use the tool to schedule activities in the calendar, share files or bookmarked websites using the library, post assignments, tally survey results, and automatically grade quizzes.

Fee   It is free!

Registration   The teacher needs to get an account. Once registered students are provided with a code, they can use to create their own accounts. Parents can also be invited into the community using a parent code.

Prezi

Description   Present information using a zoomable canvas that allows viewers to navigate from one idea to the next in a non-linear fashion. Presentations can be accessed online, embedded into a blog or website, or downloaded as a pdf or as a portable viewer.

URL   http://prezi.com

Activities   So many options, so little time. Here are a few: insert a picture (human body, map, solar system, diagram) and place frames over top of the parts to describe each element; design a timeline with frames to explain each historic event; or create a mind map to illustrate a concept.

Fee   Education licenses are free. The paid versions provide users with additional features such as more storage space, capacity to work offline, support, etc.

Registration   The free version requires an email address and students must click on a link to activate their account. The form is simple and only requires name, email, and password.

Evernote

Description   Create, organize, and store notes, photos, audio reminders, web content, and more in notebooks and make them accessible from any device.

App   You can install Evernote on any device.

Activities   Create a notebook of files and bookmarked websites and share it with students. Have students organize their research easily by taking whiteboard shots, writing text notes, clipping web pages, or bookmarking websites in a notebook.

Fee   It is free!

Registration   Requires an email address.

Word Clouds

Description	Generate a word cloud, which is a visual representation of text, with commonly used words appearing prominently in a larger font. You can print, share it as a link, embed it into a blog or web page, or screen capture it.
URL	http://www.wordclouds.com, http://www.abcya.com/word_clouds.htm, https://tagul.com, http://www.tagxedo.com, http://www.wordle.net/create
Activities	Here are some popular uses of word clouds: illustrate a famous speech, visually portray character traits from a character in a novel, highlight the important parts of a report, or produce a word graph of survey results.
	Word clouds can be used as pictures on title pages, presentation slides, posters, or bulletin boards to represent a concept visually.
	Word clouds can also be used to introduce a new unit using word association, for example, "We are going to study medieval times. What do we already know about this topic?" Repeat the activity at the end of the unit to compare results.
Fee	It is free!
Registration	No registration required.

Polls and Surveys

Description	Conduct a poll by typing in a question, setting the choices, and then sharing the URL with students. Or have students research issues important to them by collecting authentic data from their peers in a survey and analyzing the results to make decisions.
URL	https://gsuite.google.com/intl/en_ca/products/forms/, https://forms.office.com/Pages/DesignPage.aspx
Activities	Use these tools to gauge opinions or gather ideas for upcoming events. It is also a great way for a student to quiz classmates on any curriculum topic. To engage student interest and make real world connections, have them design and conduct a questionnaire with a variety of question types: multiple choice, true or false, short answer, and more.
Fee	It is free!
Registration	Users require an account.

Quick Response (QR) Code

Description	Produce a bar code that when photographed by a device with a QR code app will display information such as a web page, online video, contact details, or text.
URL	http://goqr.me or http://www.qrstuff.com
Activities	QR codes are a great way to have students engage in scavenger hunts or orienteering activities. Consider using them when going on a field trip to encourage students to pay attention. As well, they are a fast way to provide parents with contact information. Another idea is to post them as part of a school art exhibit, science fair, or open house to have visitors access more information about a topic.
Fee	It is free!
Registration	No registration required.

Voki

Description	Create talking animated characters by customizing their appearance, producing a one-minute audio file, and then sharing it by email, social media, blog, or a website.
URL	http://www.voki.com
Activities	The options are limited only by your imagination. To get you started here are some ideas: write a poem and have Voki recite it; create a Voki of a character as part of a novel study unit; or give a speech by portraying a Voki as a historical figure.
Fee	The free version requires each student to register. The subscription version, which offers class management tools, is $29.95/ year.
Registration	The free version requires an email address and students must click on a link to activate their account. The form is simple and only requires name, email, password, and birthday.

Chrome Web Apps

Description	Install applications using the Chrome web browser. The type of apps vary. Choose from e-books, creative tools, interactive information, flashcards, or drill and practice games.
URL	http://chrome.google.com/webstore
Apps	There are so many apps to use. Here are a few options:

MeeGenuis! Children's Book	A bookshelf of audio books for children.
Pixlr Editor	Photo editing software that is similar to Photoshop. Apply filters, adjust color, clone, remove red eye, and more!
Useful Periodic Table	Click the interactive periodic table to learn about the elements. Take a quiz of the names, symbols, and atomic numbers.
Brain Pop Featured Movie	Watch the animated movie daily about a historical event and then test your knowledge with an interactive quiz.
Sketchpad	Sketch designs using paint brushes, shapes, or textures.

Fee	Many apps are free, some offer free trials, others give you partial access, and still others have a subscription fee.
Registration	To use Chrome Web Apps a user needs to have the Chrome browser installed and a Google account. Each app has different registration requirements.

Classroom Management and BYOD

BYOD creates new challenges for classroom management. Here are some helpful tips! Read them and find the ones that are right for you.

☐ BYOD Zone Signs

Post signs around the school to let students know if they can use their device in that space. For areas such as bathrooms and locker rooms, post clearly visible NO DEVICE ZONE signs.

☐ BYOD Reminders Sign

Perhaps you are only using the devices from time to time. Let students know when you have planned an activity that requires a device. Post a sign, such as *BYOD Tomorrow*, on the door to make sure they bring it to class the next day.

☐ BYOD Permitted Signs

Post a visual cue that informs students when you may want devices turned off, for example during a test. Create a clearly visible way for students to see when device use is permitted at different times during the class period. For example, make a big green traffic symbol with the word YES, and a red traffic symbol with the word NO.

☐ Desktop Ready

As students enter the room, have them place their devices on their desk with their screens down. This will let you know which devices are available and who has their device. It will also save time in students having to get their device later from their desk, pocket, backpack, or locker, which can be disruptive and waste instructional time.

☐ Spot Check

Enforce the BYOD policy. Verify that students are on-task by periodically checking their screens. Train your students to hold or turn their devices so that their screens face you whenever you say *Spot Check*.

☐ Walk Around

Get up and stroll around the room. This will let you monitor student activities to confirm they are on-task and not engaging in inappropriate behavior.

☐ Screens Down

When you need students' attention have them turn over the device so that the screen is down or close their laptop lid. Train your students to do this instantly whenever you say *Screens Down*.

☐ Observe Body Language

Get to know the difference between what students look like when they are engaged in social versus educational use of their device. For example, texting friends happens in short bursts, involves only a few finger strokes, and is often followed by smiles or snickers. Whereas, writing a report tends to involve continuous typing accompanied by a focused expression.

☐ Get Involved

Don't just assign an activity - do it alongside your students. If you have access to your own laptop that is connected to a projector, it is a good idea to model completing the task. Your involvement will be motivating to students. It also serves the practical purpose, as you can suggest relevant resources, design tips, and pitfalls to avoid, based on experience.

☐ Use the Device Often

Parents have spent the money and students have taken the time to bring in their device, which means they are expecting to use it. Make the device an important part of the lesson.

☐ Team Up

If not everyone has a device, design lessons that have a collaborative component. For example, at the beginning or end of a lesson have students work in partners or small groups to take a poll, survey, or quiz. Or have teams compose a joint response to a question in the form of a post, tweet, or instant message. This will engage learners and maximize the use of the devices in the classroom.

☐ Explicitly Teach Technology Skills

Many supporters of BYOD state that students need to know how to use their own applications and explicit instruction is not required. However, this approach is often not realistic and can place limits on students who tend to use familiar apps, without challenging themselves to try something different. For example, students on their own may not discover how to set up a blog, edit a video, or produce a Wordle. Throughout the school year, consciously design activities that use various apps and model how to use them to complete an assignment. Once students have gained expertise in using the app, they will be able to apply their skills independently to new situations.

☐ Generalize Assessment Tools

With BYOD, often students are given the choice upon the product they create to demonstrate their learning. For example, one student may write a report, another create a video, and still another produce a Prezi presentation. Design assessment tools that focus on the performance criteria and then include general aspects such as quality, organization, style, originality, timeliness, work habits, or sources. This will allow you to use the same tool for different products.

☐ Student Designed Assessment Tools

The type of digital products students can produce vary depending on the device. To aid in evaluation, challenge your students to design their own assessment tool. Many online tools can help them generate rubrics and checklists. Not only will this save you time, but also it is an excellent critical thinking activity.

☐ Device Class List

Record the device type for each student (laptop, tablet, smartphone, nothing) in a class list. Use this information to organize groups, design activities, and create an equitable environment.

☐ Classroom Experts

Produce a bulletin board that identifies classroom experts. Students can refer to the board to find help with using apps. Please note, peers should not install software on another students' device nor alter device settings.

☐ Back Up Plan

There are power outages, WIFI connectivity issues, and server failures. Plan for them. Design alternative lessons that can achieve the same goals without using technology. Just like how you have activities in a folder for a supply teacher, similarly keep a list of paper and pencil tasks handy as a back up plan.

☐ Timely Troubleshooting

Technical issues will happen and you can't have them derail a lesson. If a student is having a problem, encourage them to follow along with the student beside them until there is an opportune time to examine the issue in more detail. Much like sharpening a pencil, there is an appropriate time to do this task. Troubleshooting needs to be done at a suitable moment and students need to recognize that in some cases an immediate fix may not be possible. In this case, they will need to find an alternative way to complete the assignment.

☐ Power Up

Establish rules and routines for charging devices. Students are responsible for bringing their device fully charged to school in the morning. Should they need to recharge it throughout the day a charging station may be set up within the classroom. In this case, students need to bring their own connectors. Let students know that they cannot charge their device from any outlet in the school as this may overload circuits or create a safety risk. If a charging station is not available and a battery fails, students will need to find an alternative way to complete the assignment.

☐ Diversity in Products

Design assignments that have a range of product options to demonstrate learning. Always include a traditional paper and pencil task or project for students who do not have a device.

☐ Equal Access

Provide equal access to technology. For students who do not have a device create a lending library, use a bank of computers in the back of the classroom, book a mobile cart, or schedule computer lab time.

☐ Role Play

Have students perform skits showing how to resolve problems with BYOD to demonstrate an understanding of the rules. Skit ideas include *Power Up (how do you charge device), In the Zone* (where can you use device), or *Coaches Corner* (how do I get help).

Teachers Concerns about BYOD

Are you nervous about BYOD? If you are, that's okay. Feeling anxious about something new is natural. Change is exciting but it is also a bit scary. Review the questions teachers have about BYOD. The answers should alleviate some of your concerns.

Do I have to be an IT expert?

No, you don't. Students are to be familiar with how to use their own device. Teachers are not IT support staff. Resources will be available to help students connect their device to the network. For help with apps locate student experts that can assist their peers. Please note, assistance should be limited to how to use the app. Peers should not install software on another student's device nor alter device settings.

Do I have to know how to use ALL the applications on EVERY device?

No, you don't. You don't need to be an expert in *everything*. Students are to be familiar with how to use the apps on their own device. However, to design lessons that integrate technology into curriculum it is a good idea to familiarize yourself with how to use popular web apps. You may also wish to have student experts assist peers with how to use apps.

Will BYOD create an unfair learning environment?

No, it won't. Participation in BYOD is voluntary for students. You must create an equitable learning environment that does not penalize students without devices. To create equal access to technology take advantage of a lending library, book a mobile cart, schedule computer lab time, or use computers in the back of the classroom. As well, design activities that have a collaborative component to pair those students without a device, with device holders. In addition, develop a range of options for students to demonstrate their learning so that there is a choice to create traditional paper and pencil, as well as digital products.

Am I going to have to be responsible if a device gets stolen or broken?

No, you're not. The issue of damage or theft will be handled according to existing school policy. Just as if a jacket or bike is stolen, calculator broken, or ball flattened, the issue will be handled by the school principal. However, in many BYOD policy documents, parents are encouraged to purchase additional insurance.

Am I going to have extra work?

Somewhat. There is a learning curve associated with familiarizing yourself with various web apps. However, on the plus side many web apps can save teachers time through automatically grading systems or allowing them easy access to student work digitally.

Will students be able to access inappropriate content?

Somewhat. BYOD will allow students access to the school WIFI network. The Internet filter will work to restrict inappropriate web based content. However, this tool is not flawless and supervision will still be required. Moreover, since the device belongs to the student, theoretically they could install apps or have content that is inappropriate for a school environment. Handling this issue is built into the BYOD policy. Bringing a device to school is a privilege that can be revoked if abused.

Will BYOD cause students a distraction?

Perhaps at first. Establish rules and routines to help students learn how to use their device appropriately. You will need to discuss explicitly how to behave as digital citizens and frequently revisit the expectations associated with having a device.

Will the use of the device be teacher directed?

Yes. Administrators will encourage you to develop curriculum that integrates the use of student devices. However, when and how they are used will be at the sole discretion of the teacher. There is the risk that students may complain that one teacher in the school provides them with more access than another teacher. Do not feel peer pressured. Encourage your students to respect the differences in their learning experiences and the requirement of different subject areas.

Will there be an increase of plagiarism?

No. Devices do make it easier to copy and paste digital content. However, students need to respect copyright laws. Discuss plagiarism and explain how to rephrase text and properly cite the source of information. As well, you can use online apps to verify the originality of student work.

Classroom Rules for BYOD

The BYOD policy will provide strict guidelines on the appropriate use of student owned devices, as well as the consequences for abuse. Parents and students will have read the policy and signed the BYOD agreement form.

Students need to remember that bringing a device to school is a privilege that can be revoked. It is a good idea to post BYOD rules in the classroom to act as a reminder.

Here are a few suggestions:

1. Be a good digital citizen.

2. Work with your device in approved locations.

3. Use for assigned tasks only.

4. Take photos/videos for assignments only.

5. Use of the device is restricted to its owner.

6. Bring device fully charged to school.

7. Charge it safely at approved stations.

8. Use the school's WIFI network only.

9. Remove ear buds/turn down screen when asked.

10. Turn off device or put to sleep when not in use.

Parents Concerns about BYOD

Do I have to supply a device for my child to bring to school?
No, you don't. Participation is voluntary. The school will provide access to devices when technology is required through scheduled computer lab time, booked mobile carts, or via a lending library.

What device should I purchase?
The device you purchase for your child is based on your discretion. It can be a laptop, tablet, e-reader, or smartphone. The device must be able to connect to the school network and a MAC address must be provided. Please note _____ devices are not permitted.

What software is required?
No specific software will be required. Educators will attempt to leverage whatever software is available on the device. If specific software is required, the school will provide access through scheduled computer lab time, booked mobile carts, or via a lending library. Parents are encouraged to provide protection software on the device to prevent malware and viruses.

When can my child use his or her device at school?
A device must be used for educational purposes under the direction and supervision of school personnel. Usage is not guaranteed and is based on the discretion of the teacher.

What happens if my child runs up cellular network charges while using the device at school?
Students must use the school WIFI network. Use of a 3G/4G network is prohibited. Any cellular network charges due to unauthorized use will be the responsibility of the parent.

Will my child be able to access inappropriate content?
BYOD will allow students access to the school WIFI network. The network is filtered to block access to inappropriate content. However, no filtering system is perfect. If students inadvertently access content that is unsuitable, they should inform their classroom teacher.

Is it possible for my child to perform all their schoolwork using their device?
No. Use of the device will vary depending on the learning outcome. Some assignments will still require students to complete the work by hand or using traditional instructional materials such as printed books. In some cases, the teacher may have a system for handing out and accepting work electronically, however this will vary depending on the situation.

Will my child be able to text friends during class?
Use of the device will be limited to educational purposes. Students may exchange messages under the direction and supervision of school personnel as it relates to the assignment. Any unauthorized exchange of messages is a violation of the BYOD policy.

Can I contact my child using their device during school hours?
Contacting your child during school hours via text messages, emails, phones calls, or other digital means can disrupt the learning environment. If you need to contact your child, please phone the school office.

Is the school responsible for loss, theft, or damage?
No. Your child is responsible for the care and security of their device.

What recourse do I have if my child's laptop is stolen?
Theft is the responsibility of the owner. Contact school administration if your child's device is stolen. To aid authorities, it is advised that you label the device, record device details such as make, model, and serial number, and install tracking software. It is also recommended that parents contact their insurance company to obtain hazard and/or theft coverage.

What happens when my child's battery dies?
Your child is responsible for bringing their device fully charged to school each day. It is advised that if one battery does not provide the required length of use then a second battery should be purchased. Charging a device is limited to stations throughout the school. Permission for their use is required by school personnel. If a charging station is not available and a battery fails, your child is responsible for finding an alternative way to complete the assignment.

What happens if my child forgets their device at home?
Your child is expected to come to school prepared to learn. Students will be encouraged to store their files using a web app, making their work accessible through any device with the Internet. If deemed essential, your child will be able to access their work using a school owned device. However, if this is not available, your child must find an alternative way to complete their work.

Does my child have to share his or her device?
No. Your child should not lend his or her device to another student. It is for their exclusive use. From time to time, an assignment may have a collaborative component in which students work together in partners or small groups. In this learning situation, your child will maintain sole use over their device.

Can a teacher confiscate or search my child's device?
Yes. School personnel can confiscate a device if they suspect a breach of the BYOD policy. If there is suspicion of inappropriate content or misuse, the school can search the device with the expressed consent of the parent.

Will cyberbullying increase now that students have devices while in school?
Digital citizenship is an important element of the BYOD initiative. Students must learn how to behave responsibly when using technology. Bullying of any kind will not be tolerated and is a direct violation of the existing *Code of Conduct.*

Will my child have access to technical support while at school?
Your child must be familiar with how to use their device. Teachers are not IT support staff. Instructions will be available to explain how to access the school WIFI network. However, school personnel will not troubleshoot hardware, software, or network issues.

Are You Ready for BYOD? Questions to Ask

Before launching a BYOD initiative there are many issues that require consideration. Review the list of questions. Use them to frame a discussion about BYOD at your school.

Electronic Device
Hardware

- ☐ Can a student bring any device? (smartphone, tablet, netbook, e-readers, laptop, gaming console)
- ☐ Will there be minimal standards such as screen size, processing speed?
- ☐ Do you want students to be able to use their devices to interact with existing technology such as interactive white boards?
- ☐ Do you want teachers to manage content between devices?
- ☐ Will your school offer students devices for purchase?
- ☐ Will your school offer a leasing option to parents?
- ☐ Will students be allowed to bring multiple devices? (e.g. smartphone and laptop)

Software

- ☐ What apps will students be using?
- ☐ Will the school or teacher specify or recommend apps?
- ☐ Will teachers have access to a learning management system (LMS)?
  - o Will they be able to pick their LMS?
  - o Will they be told which LMS to use?
  - o Will they receive training on how to effectively implement the LMS?
- ☐ Who purchases apps?
  - o Will your school offer educational pricing for software?
  - o Will your school charge a user fee for apps?
- ☐ Will the school require student devices have antivirus/malware protection?
- ☐ Some apps require an email address to register. Will students be given a school email address or will parents need to sign their child up for an email account?

Equal Access

- ☐ What alternatives will you offer students without devices to guarantee equality (lending library, computer lab, mobile cart, computers in classroom)?
- ☐ How many devices would you need to ensure equality?
  - o What type of device will you provide?
  - o How often will this equipment be updated to avoid a device gap as technology advances?
- ☐ What percentage of the student population likely has a device to bring in?

Education
- ☐ What activities will students complete?
- ☐ What measures will be taken by the teacher to make sure that students without a device are not penalized?
- ☐ Are there e-book versions available for existing textbooks?
  - o What is the cost to obtain the e-book version?
  - o Will parents pay for an e-book version?
- ☐ What classroom rules should be established for BYOD?

Usage
- ☐ Where can the students use their device? In the classroom, library, hallway, gym, restroom, playground, school bus?
- ☐ Should access be restricted during certain hours of the day? Can it be used before/after school, when changing classes, recess, or lunchtime?
- ☐ Is device usage restricted to educational purposes or can students use it for other reasons?
- ☐ Will students be able to print from their device?
- ☐ Will students be able to use devices outside of school hours at school-sponsored events?

Users
- ☐ Who can bring a device? (e.g. students, parents, teachers, volunteers, school contractors)
- ☐ Will access be restricted by grade level?
- ☐ Will access vary depending on user?

Technical Support
- ☐ Will teachers be required to offer technical support for hardware, software, or network issues?
- ☐ What resources will be provided to help students connect to the network?
    - o Who will create the resources to help with technical support?
    - o What format will be used for the resources? (print, video)
    - o How will these resources be shared? (handout, posted to website)
- ☐ Will a tech team be created to help students with their devices?
- ☐ How will teachers offer support for apps?

Storage
- ☐ Do devices have to be turned off and stowed away when students are not in class?
- ☐ Where are devices to be stored? (e.g. lockable trollies, cupboards, or lockers)

Disciplinary Measures
- ☐ What constitutes an infraction?
- ☐ What existing school policies already cover infractions?
- ☐ Can school personnel confiscate a device if it is not being used appropriately?
    - o Under what circumstance can the device be confiscated?
    - o What is the duration before the child's device is returned?
- ☐ Can school personnel search the contents of a device if it is not being used appropriately?
    - o Under what circumstance can the device be searched?
    - o Does a parent need to be present or can they offer verbal consent?
    - o Can a search be conducted without parent permission?
- ☐ Can school personnel limit, suspend, or revoke the privilege of bringing a device to school?

Professional Development
- ☐ Are all teachers committed to supporting BYOD? How can you create a "buy-in"?
- ☐ What training is required to support teachers in their implementation of student devices?
- ☐ How will teachers be given time in their schedule to collaborate with fellow teachers?
- ☐ How will teachers be supported over time?

Parents
- ☐ Do parents support BYOD?
- ☐ How do you want to involve parents in BYOD?
- ☐ Do you want to offer an information session, where they can explore devices to see their educational use?
- ☐ How will you keep parents informed about BYOD?
- ☐ Should parents be encouraged to purchase hazard/theft insurance?

Policy
- ☐ What will be in our BYOD policy?
- ☐ What content should be included in the parent letter?
- ☐ What should the BYOD agreement form look like?
- ☐ Do all users (administrators, teachers, volunteers) need to sign the BYOD agreement or only students?
- ☐ Does the Internet Acceptable Use policy need updating?

Technical Considerations
- ☐ Can the current infrastructure serve additional devices? What upgrades need to be made to provide a secure, efficient service? (bandwidth, firewall, access points, server, mobile device management system)
- ☐ Will WIFI networks be public and permit only Internet access or will it be private, permitting students to login to server?
  - o If private, what upgrades are required to have an efficient authentication process?
- ☐ Does the infrastructure have a backup system so that if the WIFI service is interrupted, education is not disrupted?
- ☐ Is there monitoring software to allow IT to adjust the service to reduce the impact of high demand videos or other apps that hog bandwidth?
- ☐ Are there enough outlets and power sources for students and others to charge devices?
  - o Will there be charging stations?
  - o What rules will be associated with using the charging stations?
- ☐ Will students register their devices? What process will be used for registration?

Financial Considerations
- ☐ How much will it cost to upgrade the infrastructure?
- ☐ Will it cost money to upgrade the electrical system to accommodate charging stations?
- ☐ Is there additional software that needs to be purchased to monitor the network?
- ☐ Is there a cost associated with maintenance of the infrastructure?
- ☐ How often will the infrastructure require updating?

Sample Electronic Device Policy

Purpose

This policy outlines the acceptable use of electronic devices to maintain a safe and secure education environment with the goal of preparing students for the future, improving learning, and fostering digital citizenship.

Definitions

Electronic devices shall include all computing devices that can take photographs; record audio or video data; store transmit or receive messages or images; or provide a wireless connection to the Internet. Examples of these devices include, but shall not be limited to desktops, laptops, tablets, smartphones, e-readers, as well as any technology with similar capabilities. _____ devices are restricted.

Digital Citizenship is the norms of responsible behavior related to the appropriate use of technology. It encompasses digital literacy, ethics, etiquette, and online safety.

User is any individual granted authorization to use electronic devices. Users may include students, parents, staff, volunteers, visitors, contractors, or individuals employed by service providers.

1. *Authorized Use of Electronic Devices*
Electronic devices brought to school shall be restricted to educational and administrative purposes in approved locations and times under the supervision of school personnel. Authorized users shall:

   a. use electronic devices in accordance with the expectations set forth in the school Code of Conduct and Internet Acceptable Use policy;
   b. comply with guidelines set by school personnel for the use of electronic devices while on school property or while engaged in a school-sponsored activity;
   c. take photographs and audio/video recordings only with a person's consent and when authorized by school personnel for educational purposes;
   d. access the school network using approved infrastructure only.

2. *Responsibilities*
   - All users are responsible for:
       a. registering their electronic device with the school and submitting a signed *Use of Electronic Devices Agreement* prior to connecting to the school network;
       b. ensuring electronic devices are used in accordance with school policies and procedures;
       c. caring, maintaining, securing, and storing electronic devices;
       d. preserving privacy of accounts, login names, passwords, and/or lock codes to maintain security of electronic devices and data;
       e. maintaining safe and productive learning environments when using electronic devices;
       f. practicing digital citizenship.

- All administrators are responsible for:
    a. informing users of school policy;
    b. establishing and monitoring digital citizenship through the school Code of Conduct and Internet Acceptable Use policy;
    c. responding effectively to disciplinary issues resulting from inappropriate electronic device usage;
    d. communicating appropriately with school personnel, parents, and students if school policy is violated from electronic device usage;
    e. providing information to users explaining how to connect electronic devices to the school network.

- Teachers are responsible for:
    a. creating equitable learning opportunities that include electronic devices for education purposes when relevant to curriculum and instruction;
    b. determining when students are able to use school or personal electronic devices for education purposes;
    c. supervising student use of electronic devices;
    d. responding effectively to disciplinary issues from inappropriate electronic device usage;
    e. communicating appropriately with administrators, parents, and students if school policy is violated from electronic device usage.

- Students are responsible for:
    a. using electronic devices for educational purposes in approved locations under the supervision of school personnel only;
    b. implementing virus and malware scanning on their electronic devices;
    c. reporting any inappropriate electronic device usage to a teacher or administrator immediately;
    d. ensuring their electronic devices are charged prior to bringing them to school;
    e. continuing to learn using an alternative method if an electronic device malfunctions.

- Parents are responsible for:
    a. helping their children take all reasonable steps to care, maintain, secure, store, and transport their electronic device;
    b. helping their children preserve the privacy of accounts, login names, passwords, and/or lock codes;
    c. identifying the electronic device by labelling it, recording details such as make, model, and serial number, and/or installing tracking software;
    d. procuring hazard or theft insurance for an electronic device;
    e. encouraging their children to follow school policy and practice digital citizenship;
    f. contacting the school office to communicate with their child during the school day, instead of using text messages, emails, phone calls, or other digital means that have no curriculum related/education purpose;
    g. assuming all responsibility for their child's unauthorized use of non-school Internet connections such as a 3G/4G cellular phone network.

3. *Unauthorized Use of Electronic Devices*
Prohibited uses of electronic devices includes, but are not limited to:
   a. areas where there is a reasonable expectation of privacy, such as change rooms or restrooms;
   b. circumventing school's approved network infrastructure to access Internet connections using an external wireless provider;
   c. downloading files that are unrelated to educational activities;
   d. engaging in non-educational activities such as playing games, watching videos, using social media, listening to music, texting, or taking personal calls;
   e. cheating on assignments or tests;
   f. accessing information that is confidential;
   g. using photographs and audio/video recordings for a purpose unrelated to the school assignment;
   h. obtaining unauthorized access and using it to alter, destroy, or removing data;
   i. engaging in cyberbullying which involves using technology to harass, threaten, embarrass, or target another person;
   j. infecting a device with a virus or other program designed to alter, damage, or destroy;
   k. committing a crime under federal, provincial, and/or municipal statues;
   l. infringing upon copyright laws or plagiarizing protected information;
   m. using network resources for commercial or political party purposes.

4. *Consequences: Remedial and Disciplinary Action*
   - Individuals who do not comply with this Policy will be subject to appropriate consequences consistent with the school *Code of Conduct* and *Internet Acceptable Use Policy*.
   - Consequences may include, but are not limited to, the following, either singularly or in combination depending on the individual circumstances:
        a. temporary confiscation of device;
        b. search of device contents to locate evidence of misuse;
        c. limitations, suspension, and/or revocation of access privileges to personal and school technology resources;
        d. disciplinary measures, up to and including dismissal;
        e. legal action and prosecution by relevant authorities.

5. *Liability*
   - Users are solely responsible for the care and use of electronic devices they choose to bring to school. Users bringing these devices to school do so at their own risk.
   - The school and school personnel shall not be liable for the loss, damage, misuse, or theft of any student-owned electronic device: possessed/used during the school day; in/on school buildings, property, vehicles, or contracted vehicles; during transport to/from school; while attending school-sponsored activities.
   - The school and school personnel shall not be responsible for any negative consequences to electronic devices caused by running specific software or by accessing the school network.

6. *Technical Support*
   - School personnel shall not provide technical support, troubleshooting, or repair for user-owned electronic devices.

Sample Parent Letter

Dear Parents/Guardians,

School Name is launching a Bring Your Own Device initiative this school year. Students in Grades X, will be able to bring laptops, netbooks, tablets, or smartphones to use for educational purposes. Having ongoing access to technology will help your child develop greater independence, increase engagement, and develop skills required to thrive in the 21st Century.

Educational Activities

Student devices will be used to access resources, complete assignments, and for personal organization. Educational activities may include researching information, producing documents, analyzing data, participating in surveys, producing videos, reading e-books, creating blogs, taking notes, or scheduling events. The use of the device is at the sole discretion of the teacher.

Digital Citizenship

A focus of this initiative is digital citizenship, which is the responsible use of technology. Your child will learn digital skills, ethics, etiquette, and online safety. These are important aspects of participating in today's world.

Safe and Secure

To maintain a safe and secure learning environment, a filtered Internet connection will be provided for students. They will not be permitted to use a personal broadband connection such as a 3G/4G phone network. As well, students will only be able to use their device under the direct supervision of their teacher. Any unauthorized use can result in the device being confiscated, searched, and privileges being revoked.

Responsibility

Students are solely responsible for their device. They must bring it fully charged to school. Similar to other personally owned items, *School name* is not liable for loss, damage, misuse, or theft.

Technical Support

Resources will be provided to help students connect their device to the school network. Your child must be familiar with how to use their device. Teachers will incorporate the use of your child's device into learning. However, they will not provide technical support.

We look forward to the educational opportunities that BYOD will bring. Participation in this initiative is voluntary. Your child will not be left out if they do not have a device. *School name* will continue to provide access to school owned technology. To learn more:

✓ Refer to the *Frequently Asked Questions* sheet.

✓ Review the *Electronic Device Policy* with your child.

If you would like your child to participate, sign the *Electronic Device Consent Form* and complete the *Device Registration Form*.

Sincerely,

Principal Name

Sample Electronic Device Consent Form

I/we have read and understand the *Electronic Device Policy*.

I/we understand that the device is to be used for educational purposes only.

I/we assume all responsibilities for caring for the device.

I/we understand that *School Name* is not responsible for loss, damage, misuse, or theft.

I/we understand that infractions to the agreement may result in the device being confiscated, searched, and/or privileges revoked. School disciplinary action may apply and legal action taken, if deemed necessary.

I give my child _____ permission to bring their own electronic device to school.

                        Print Full Name

Date: _____

Parent's/Guardian's Signature: _____

Student's Signature _____

What is the Secret to a Successful BYOD Program?

PLANNING! Nothing is worse than launching a BYOD initiative that fails. Don't let that happen to you! Take the time and do things right. To have a successful BYOD program you should:

- Establish a reliable infrastructure.

- Develop a policy that outlines accepted devices, restricted devices, authorized use, infractions, consequences, and responsibilities of stakeholders.

- Form a lending library to ensure an equitable learning environment.

- Supply adequate storage facilities.

- Provide charging stations.

- Select a learning management system.

- Incorporate the use of devices and web apps in staff meetings.

- Offer professional development.

- Have students and parents read policy and sign an agreement form.

- Launch a pilot program. Make participation voluntary.

- Post instructions for connecting devices to the network.

- Post signs around the school to illustrate if the area is approved for device usage.

- Initiate a digital citizenship awareness campaign.

- Display classroom rules for using devices.

- Use web apps to create consistency.

- Use the devices regularly during instruction.

- Review BYOD continuously and make modifications to the initiative.

References

Alberta Education. (2005). *Differentiated Instruction.* Retrieved from http://www.learnalberta.ca:
    http://www.learnalberta.ca/content/kes/pdf/or_ws_tea_elem_02_diffinst.pdf

Alberta Education. (2012). *Bring Your Own Device: A Guide for Schools.* School Technology Branch.
    Edmonton: Crown in the Right of the Province of Alberta. Retrieved from
    http://education.alberta.ca/media/6749210/byod%20guide%20revised%202012-09-05.pdf

Center for DIgital Education. (2011). *Mobile Learning: Preparing for BYOD (Bring Your Own Device.*
    Retrieved from North American Communications Resource: http://www.nacr.com/wp-
    content/uploads/2012/03/Avaya_THE-Journal-Whitepaper_Mobile-Learning-Preparing-for-
    BYOD.pdf

Dunleavy, M., Dextert, S., & Heinecket, W. (2007). What Added Value Does a 1:1 Student to Laptop
    Ratio Bring to Technology-supported Teaching and Learning? *Journal of Computer Assisted
    Learning*(23), 440-452. Retrieved from http://blog.amersol.edu.pe/g9-
    1to1/files/2011/10/LaptopTeacherPD.pdf

Flanigan, R. (2013, 02 07). Schools Set Boundaries for Use of Students' Digital Devices. *Education Week
    Digital Directions, 06*(02), 37-39. Retrieved from Education Week Digital Directions:
    http://www.edweek.org/dd/articles/2013/02/06/02byod.h06.html

Froyd, J., & Simpson, N. (2010, 03). *Student-Centered Learning Addressing Faculty Questions about
    Student-centered Learning.* Retrieved from Course, Curriculum, and Laboratory Improvment
    (CCLI): http://ccliconference.org/files/2010/03/Froyd_Stu-CenteredLearning.pdf

Greendale Schools. (2013). *Get Connected.* Retrieved from Get Connected:
    http://www.greendale.k12.wi.us/resources/Get-Connected-FAQs.pdf

Hamilton-Wentworth Catholic District School Board. (2011, 06 21). *Mobile Digital Devices Policy A12.*
    Retrieved from http://www.hwcdsb.ca/board/policies/:
    http://www.hwcdsb.ca/board/policies/?fileID=553

Lower Moreland Township School District. (2012, 08 21). *Electronic Devices Policy #237.* Retrieved from
    Lower Moreland Township School District BYOD:
    http://www.psba.org/districts_policies/l/332/POLLMOR237.pdf

Microsoft. (2013). *Fostering Digital Citizenship.* Retrieved from Microsoft Safety & Security:
    http://www.microsoft.com/security/resources/digital-citizenship.aspx

Nowra Christian School. (2013, 04 12). *Bring Your Own Device Policy.* Retrieved from Nowra Christian
    School: http://www.ncs.nsw.edu.au/index.php/policies/policies-a-c/byod

Ontario Ministry of Education. (2013). *Blended Learning.* Retrieved from E-Learning Ontario:
    http://www.edu.gov.on.ca/elearning/blend.html

Peel District School Board. (2013, 02 12). *Digital Citizenship Policies and Regulations Policy #78.*
    Retrieved from Peel DIstrict School Board - Board Policies:
    http://www.peelschools.org/trustees/boardpolicies/documents/policy%2078.pdf

Point Option School. (2013). *NNPS Bring Your Own Device Guidelines for Schools.* Retrieved from
    http://pointoption.nn.k12.va.us/export/sites/PointOption/documents/BYOD__Guidelines.pdf

Samsung and Meru Networks. (2012, 02 05). *One-to-One 2.0 Building on the 'Bring Your Own Device'
    (BYOD) Revolution.* Retrieved from Center for Digital Education:

http://www.samsung.com/us/it_solutions/innovation-
center/downloads/education/white_papers/One-to-One_2.0_-_Handbook.pdf

San Diego County Office of Education. (2013). *What is Flexible Grouping?* Retrieved from Supporting
Differentiated Instruction: http://kms.sdcoe.net/differ/21-DSY/56-DSY.html

Tallmadge City School District. (2013). *Bring Your Own Device Pilot Program.* Retrieved from Tallmadge
City School District BYOD:
http://www.tallmadgeschools.org/cms/lib04/OH01001396/Centricity/Domain/305/TCS_Student_A
ddendum.pdf

Valentino, C. (2000). *Flexible Grouping.* Retrieved from Houghton Mifflin Harcourt Education Place:
http://www.eduplace.com/science/profdev/articles/valentino.html

Wiggins, G. (2012, September). Seven Keys to Effective Feedback. *Feedback for Learning, 70*(1), pp. 10-
16. Retrieved from Educational Leadership: http://www.ascd.org/publications/educational-
leadership/sept12/vol70/num01/Seven-Keys-to-Effective-Feedback.aspx

Willard High School. (2012, 03). *BYOD at Willard High School Parent Information.* Retrieved from
http://fusionfinds.files.wordpress.com/2012/03/parentbyodfaqs.pdf

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