

TECHNOLOGY INTEGRATION IN SCHOOLS

Compiled by Elizabeth Greef, November 2015

This is a broad topic and may take many forms.

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BYOD links

Of course, apps are just tools. It is important to keep in mind the 21st century skills students require and how the landscape of learning is changing. For thoughts on this, see the clips, broader conceptual links and samples in the **Technology and teaching** section.

It may be that your school is considering a BYOD (bring your own device) approach – look at the **BYOD** links.

If you are creating a digital literacy scope and sequence, look at the item **Creating and information and/or digital literacy scope and sequence** in the **IASL PD Library**.

You may be evaluating apps to include and recommend for students in which case **App evaluation** forms and the app lists may be of most use. Ask similar schools for recommended apps, search yourself for recent well-regarded apps and look at the lists below. If possible, have a small team evaluate and discuss apps of potential use for your school community.

You may be looking at a particular aspect of technology integration such as improving critical thinking using digital tools or questioning strategies or a particular range of tools such as presentation tools. Look at the sections on **Digital tools by theme or purpose**. Some of these have related articles in the section.

TECHNOLOGY AND TEACHING

4 clips to view and ponder old and new ideas in learning

[Alan November, "Who owns the learning?"](#) – the biggest barrier to using technology is the change of control

[Did you know? Shift happens. 2014 remix](#)

[Dr Eric Mazur, "From questions to concepts"](#) – changing the underpinning of how children learn

[Salman Khan, The flipped classroom](#)

[2015 edition of the taxonomy of school evolutionary stages](#) by Mal Lee.
[Free download](#)

[21 technologies that will decentralise the world](#)

[8 ways technology has completely rewired our brains](#)

[Creative Educator: 21st century classrooms](#)

[Creative Educator: Project-based learning](#)

[Digital schools grow digital communities](#) – Mal Lee
How digital schools impact their communities

[Evolution of Blooms taxonomy](#)

[How to infuse digital literacy throughout the curriculum](#)
From Powerful Learning Practice, a discussion of skills in evaluating online content, engaging online and students' development of digital literacy skills.

[KWHLAQ for the 21st century](#)

The popular K-W-L chart upgraded for the 21st century to include 21st century skills, media platforms, tools and activities.

[Let's play: hands-on self-paced discovery of Web 2.0 tools](#)

Somewhat dated site from 2009 created by Elizabeth Greef for providing professional development to teachers on Web 2.0 tools. This was based on the original 23 Things and created with the permission of Helene Blowers. This template can be adapted for PD purposes using newer tools and apps.

[Ms Cassidy's Classroom Blog](#) – example of a Grade 1 teacher using a blog to record the learning of her students

[NCTE Framework for 21st Century Curriculum and Assessment](#)

[Scoop.it: Project-based learning](#)

[Smart libraries, smart classrooms](#), Judy O'Connell, 2015

[StudyVibe](#)

An outstanding site for teachers and students interested in the research process, learning perspectives and strategies, and digital tools

[Teaching ethics in an age of technology](#)

An argument for how and why to teach ethics as a 21st century skill

[Who cares about the platform? Let's just focus on developing 21st century skills](#) by Pip Cleaves

TECHNOLOGY AND RESEARCH

[Alberta Education: Research and Publications](#)

[Cloudlearn.net](#) – Stephen Heppell on putting an end to locking and blocking

[ITL: Innovative Teaching and Learning Research](#)

[PILSR: Partners in School Learning Research](#) – schools can contribute to research into 21st century learning

APP EVALUATION

[Kathy Schrock's iPads for Teaching: Critical evaluation of mobile apps](#)

Kathy Schrock's site offers a number of rubrics, instruments and forms for evaluating apps for use by students.

ONLINE RESOURCES – WEB TOOLS AND APPS

[4 free web tools to boost student engagement](#)

[A media specialist's guide to the internet: 16 mobile Apps for teacher librarians](#)

[Curriculum resources reviews](#)

Karen Bonanno's curated Curriculum resource reviews – web tools, apps, online resources, virtual field trips and more

[Open Ed](#) – the world's largest K-12 educational resources library
See also **Open Educational Resources in the IASL PD Library**

[Historia: game-based learning for Middle School history](#)

[Scoop-it: iPads and eBooks](#)

[Seven free science apps for iPads](#)

[The 100 best iPad apps of 2015](#)

DIGITAL TOOLS BY THEME OR PURPOSE

Academic repositories

[Khan Academy](#)

[School A to Z](#)

[TED](#)

Animation

[50 free animation tools and resources for digital learners](#)

[How students can create animated movies to teach each other](#)

[DigitalFilms.com](#)

[Do ink](#)

[GoAnimate](#)

[Fluxtime](#)

[Powtoon](#)

Audio recording

[Dragon dictation](#)

[WavePad](#)

Blogging platforms

[Blogger](#)

[Wordpress](#)

Brainstorming/Mindmapping/Planning

[Introduction to mind-mapping - Inspiration](#)

[Bubbl.us](#)

[Instagrok](#)

[Lino](#)

[MindMeister](#)

[Padlet](#)

[Padlet is now available in 14 languages](#)

[Popplet](#)

[Linking projects, ideas and concepts with Popplet](#)

[Solvr](#)

[Stormboard](#)

Coding and computer programming

[5 tools to introduce programming to kids](#)

Examples of coding languages used with children: Ruby, Python, Kodu, PHP

[Alice](#) – free and open-source programming for children to create 3D animations

[Arduino](#) – a programming language similar to C++; a more complex level of programming

[Hackety Hak](#) – teaches the basics of programming; uses the Ruby programming language to help children build apps

[Hopscotch](#) – gives you the tools to make your own games

[Lego Mindstorms](#)

[Minecraft](#) – introduces children to Java programming; however, the game costs

[Ultimate list of Minecraft guides, cheats and video tutorial apps](#)

[Scratch](#) – a multimedia authoring tool for programming for children 6 and up; uses a graphical Lego-like language

[Raspberry Pi](#) – small cheap computers

Collaborative note-taking

[AASL: collaborative note taking](#)

[5 excellent iPad apps students can use for taking audio notes](#)

[Etherpad](#)

[Evernote](#)

[Google Docs](#)

[Padlet](#)

[PiratePad.net](#)

[Twiddla](#)

Comics and cartoons creation

[Comic Master](#)

[Make Beliefs Comix](#)

[OddCast](#)

[Pixton](#)

[Storyboard Generator](#)

[WriteComics](#)

Communication and social media apps

[Teacher's comprehensive guide to the use of social networking in education](#)

Email app

[Facebook](#)

[Messenger](#)

[Skype](#)

[Twitter](#)

Content curation for teachers

[Blendspace](#)

[Easel.ly](#)

[Evernote](#)

[I've been using Evernote all wrong](#)

[Organising my studies with Evernote](#)

[Flipboard](#)

[Flipboard as a textbook replacement](#)

Ideas for creating a class resource base using Flipboard

[Gooru](#)

[Learnist](#)

[Mendeley](#) – slideshare on Mendeley, a free academic software to manage how your research appears online and a research network

[Pinterest](#)

[37 ways teachers can use Pinterest in the classroom](#)

[Scoop.it!](#)

Content sharing

[PBWorks](#)

[LiveBinders](#)

[NetVibes](#)

[Pearltrees](#)

[Scribd](#)

[Weebly](#)

[Wikispaces](#)

Critical and creative thinking

[PISA 2012 Creative problem solving](#)

Slideshare interrogating the results of PISA 2012 into creative problem solving of students

[Creative Educator: Creativity](#)

[Integrating technology to Bloom's Taxonomy](#)

[Studyvibe: Creative Thinking Templates](#)

[A new fantastic blooms Taxonomy wheel for iPad apps](#)

A useful listing of iPad apps which enhance the stages of learning in Blooms Taxonomy

[Bloom's and ICT Tools](#)

[Resources and downloads for teaching critical thinking](#)

Tools, lesson plans and rubrics to support the teaching of critical thinking

[Visible thinking](#)

Digital publishing

[Issuu](#)

World's largest collection of free-to-read publications

Digital storytelling

[Creative Educator: Digital storytelling](#)

[Five tools that help students plan stories](#)

[Create an ebook using free software](#)

[My storytelling app folder\(s\)](#)

[ACMI Storyboard Generator](#)

[Amazon Storybuilder](#)

[Bookbuilder](#)

[Capzles](#) – social media storytelling

[Comic Master](#)

[Cube creators](#)

[Picture Book Maker](#)

[Pinball](#)

[Slidestory](#)

[Storybird](#)

[Storyboard That: Digital storytelling](#)

[Storymap](#)

[Toontastic](#)

Flyers, posters, newsletters

[Gliffy](#) - flowcharts, Venn diagrams and charts

[Glogster EDU](#)

[Newspaper clipping generator](#)

[Pixton](#)

[PosterMaker App](#) (not free)

[Smore](#) - flyers, newsletters and reports – trial before subscribing

Google tips

[G-learning: Google learning and teaching with free Google tools](#)

This blog by Andreas Hofer has many useful tips on using Google tools for teaching and learning.

[7 Google search services you might want to use in class](#)

[14 Google tools you didn't know existed](#)

[100 important Google Drive tips for teachers and students](#)

[Creating interactive quizzes with Google slides](#)

[How to create a bibliography in Google documents](#)

[How to create contact groups to make sharing documents easier](#)

[How to solve impossible problems : Daniel Russell's awesome Google search techniques](#)

[Using Doctopus and Goobric to assess Googledocs easily](#)

Image editing and drawing

[Aviary](#)

[FotoFlexer](#)

[ImageChef](#)

[Photogrid](#)

[Picasa](#)

[Snapseed](#)

[Thinglink](#)

[SketchUp](#)

Image searching

[Helping students use creative commons images in presentations](#)

[iStock](#)

[Kaboompics](#)

[PhotoBucket](#)

[Pics4learning](#)

[Search-Cube – a visual search engine](#)

Infographics

[10 free web tools for creating info graphics](#)

[Easel.ly](#)

[Infogr.am](#)

[Piktochart](#)

[Visual.ly](#)

Inquiry-based learning

[Web tools to support inquiry-based learning](#)

An excellent list of various web tools with annotations to support the stages of Kuhlthau's information search process by Karen Bonanno

Maps

[11 good web tools to create educational maps with children](#)

Moviemaking

[Tips for shooting and editing videos](#)

[Top 10 movie-making apps for iPhone and iPad](#)

[iMovie](#)

[PuppetPalsHD](#)

Online citation generators

[How to create a bibliography in Google documents](#)

[BibMe](#)

[Citation Machine](#)

[Cite this for me](#)

[EasyBib](#)

[NoodleTools](#)

Online classroom environments

[Edmodo](#) – secure online classroom platform

[Stoodle](#)

Personal information management

[Delicious](#) – social bookmarking

[Diigo](#) – social bookmarking

[Dropbox](#) – for cloud storage and access

[Evernote](#)

[I've been using Evernote all wrong](#)

[Organising my studies with Evernote](#)

[I've been using Evernote all wrong](#)

[Flipboard](#)

[Flipboard as a textbook replacement](#)

Ideas for creating a class resource base using Flipboard

[Pocket](#) – save from browser or apps to read later

[Slingnote](#) – easy webclipping

Presentations

[Animoto](#)

[Blabberize](#)

[FotoBabble](#)

[GoAnimate](#)

[Haiku Deck](#)

[PresentationTube](#)

[Prezi](#)

[VoiceThread](#)

QR codes

[QR Codes in K-12 Education](#)

[Comprehensive list of QR Code generators](#)

Questioning

[From Now On: A Questioning Toolkit](#)

[Knowledge Compass](#)

[Socrative](#)

Reading

[40+ iPad apps for reading disabilities](#)

[Acceleread](#)

[Readingtrainer](#)

Reference apps

BBC or other news

[Currency calculator, XE](#)

[Google Earth](#)

[GoogleMaps](#)

[National Geographic Atlas](#)

Weather app – for local area

[World Factbook](#)

Screen capturing

[Screencast-O-Matic](#)

[Jing](#)

[Snagit](#)

Search engines

[How to create your own search engine](#)

[20 of the best search engines for students](#)

[How to solve impossible problems: Daniel Russell's awesome Google search techniques](#)

Search engines for younger students

[DuckDuckGo](#)

[Kidtopia](#)

[QuinturaKids](#)

[SlimeKids: Search Engines](#)

Surveys and polls

[Easypolls](#)

[Pollmaker](#)

[SurveyMonkey](#) – polls and surveys

[Zoomerang](#) - surveys

Teacher tools

[7 fabulous iPad apps to create animated lessons](#)

[Enhance PBL with these ten powerful tools](#)

An clear graphic on the stages of problem-based learning with summaries of the suggested useful tools: *Glogster EDU*, *MindMeister*, *Pixton*, *Myhistro*, *Animoto*, *Reeldirector*, *FotoBabble*, *VoiceThread*, *Capzles*, *Popplet*

[Three good tools for building flipped lessons that include assessment tools](#)

[Ask3](#) – to create interactive lessons

[Board Cam Pro](#) – to create interactive lessons

[CamScanner](#) – scanning software for iPad and iPhone

[Classes/Classes Lite](#) – class timetable app

[DoodleCastPro](#) – to create interactive lessons

[Education templates in Stormboard](#), a collaborative planning tool

[Educreations](#) – to create interactive lessons

[Explain Everything](#) – to create interactive lessons

[iRubric](#) – rubric developmental tool

[iTunes U](#)

[Kaizena](#) – add voice and text comments to student work

[Knowmia](#) – to create interactive lessons

[Nearpod](#) – to create interactive lessons

[PDF Expert](#) - annotating

[Penzu](#) classroom journal

[ShowMe](#) – to create interactive lessons

[Smilebox Teachers' Toolbox](#)

Timelines

[Myhistro](#)

[Read Write Think Timeline](#)

[Read Write Think Timeline tool](#) – review

[Tiki-Toki](#)

[TimeGlider](#)

[TimeToast](#)

Video sharing

[TeacherTube](#)

[Vimeo](#)

[YouTube](#)

See also **Teacher Tools** for sharing animated lessons

Apps to local TV stations

Word clouds

[Tagul](#)

[Wordle](#)

BYOD LINKS (Bring your own device)

BYOD links contributed by Luisa Marquardt, October 2015

<https://sites.google.com/a/whps.org/byod/whps-district-policy>

<https://sites.google.com/a/whps.org/byod/apps-that-support-byod>

<http://www.teachthought.com/technology/20-byod-resources-for-21st-century-school/>

<https://tackk.com/>

<http://www.nearpod.com/home.php>

Alberta Education links on BYOD

Compiled by Elizabeth Greef

[Bring Your Own Device: A guide for schools](#)

[Technology Briefing: BYOD](#)