Affordances of ICT

Extracted from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2822651/

Affordance refers to the way a technology or software can be used and what it allows the user to do or not to do. All technologies have different affordances arising from their internal structure and functionalities.

Technology	Functional Affordances	Examples	Instructional Affordances
Blog	A website by one (or more) authors with entries made in reverse-chronological order	WordPress	Blogs can foster reflective learning and critical thinking by allowing students to make the changes in their thinking visible
Social Network	An online community that supports the sharing of your persona, information and ideas	Facebook MySpace LinkedIn Ning	Social networks can foster community and a sense of belonging, may also support communication to improve learning
Wiki	A website authored by a community, highly interlinked and searchable, easy to contribute to	Wetpaint	A class may use a wiki as a collaboratively created repository for the knowledge students are learning.
Microblogging	A microblogging text tool that sends broadcasts of under 140 characters	Twitter	Microblogging is useful for providing real-time updates, short pieces of content or quiz questions to students
Serious Games	Electronic games that teach in addition to being fun and motivating	Whyville (both game and virtual world) Army of One	Games can be used by all age groups to teach a variety of content
Virtual Worlds	An online environment where you are represented by an avatar and you can explore and communicate with	Second Life World of Warcraft (both game and virtual world)	Virtual worlds are great for simulating physical environments for learning.

Technology	Functional Affordances	Examples	Instructional Affordances
	others in the world		
Content Sharing		Flickr YouTube Podcast	Allows for easy uploading and sharing of visual and/or auditory content

Questions to think about related to both affordances and sustainability:

Category	Questions to ask
Affordances	• Is the technology synchronous or asynchronous? • Can it be accessed and used by few or many people? • Can it be loaded onto a mobile device or do you need a big screen? • Will the users need to download programs or is it a web application?
Sustainability	• How easy is it to update the learning material? • How widely used is this technology and who supports it? (In general, solutions supported by a user community or a large company are less likely to disappear than those created by small entrepreneurs.) • Can content be exported into another technology if your current solution is no longer supported?

There are several ways to lower entry and sustainability barriers. Working with a group of colleagues who are committed to trying a new technology can spread the workload and has the advantage of leveraging the skills within the group.

Group strategies might include asking for help from someone who already successfully used a technology or adapting a technology that is already part of someone's personal life. Team-teaching presents special challenges and opportunities. If you team-teach with other teachers, their technology experience and comfort level are important and can be an asset or a barrier to successful implementation.

Revisit questions on affordances and sustainability of ICT
As new technologies become available, questions regarding affordances and sustainability may have to be revisited. The act of changing technologies is never completely seamless; the best we can do is to minimize the disruption by choosing technologies today with an eye toward updating in the future.

The Seven Categories of Technology
Extracted from: "Building Better Instruction" (2004) Pitler, H, Brabec.K, Fisher,K.

Technology Categories	Definition	Examples
Word processing applications	Software that enables the user to type and manipulate text	Microsoft Word, OpenOffice.org, Writer, Google Docs, MYAccess!
Spreadsheet software	Software that enables the user to type and manipulate numbers	Microsoft Excel, OpenOffice.org, Calc, InspireData, Google Spreadsheets
Organsing and brainstorming software	Software that enables the user to create idea maps, KWHL charts, and category maps	Inspiration, Kidspiration, BrainStorm, SMART Ideas, Visual Mind
Multimedia	Software that enables the user to create or access visual images, text, and sound in one product	iMovie, Microsoft Movie Maker, Adobe Photoshop, Microsoft PowerPoint, KidPix Studio, Keynote, OpenOffice. Org, Impress
Data collection tools	Hardware and software that enable the user to gather data	Probeware, USB microscopes, classroom response systems
Web Resources	Resources available on the Web that enable the user to gather information or apply or practice a concept	Virtual tours, information, applets, movies, pictures, simulations
Communication Software	Software that enables the user to communicate via text, presentation, voice, or a combination of the three	Blogs, e-mail, VoIP, podcasts, wikis