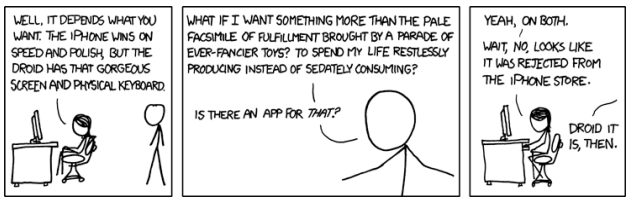
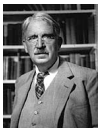
iPod 2010

Richard Millwood
University of Bolton
Core Education UK

iPhone or Droid



http://www.xkcd.com/662/



"In sum, I believe that the individual who is to be educated is a social individual and that society is an organic union of individuals."

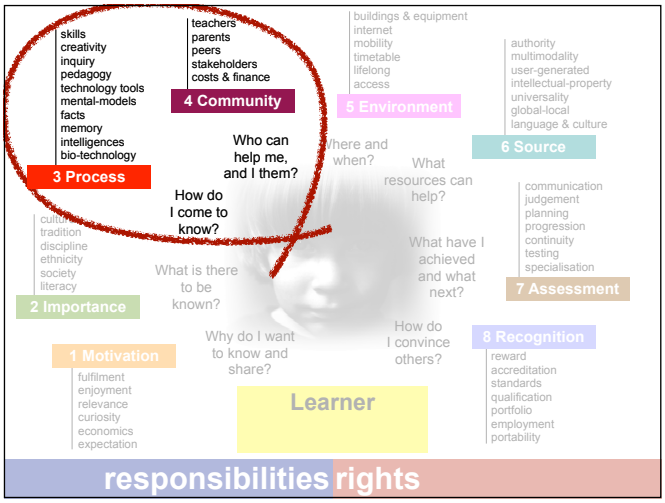
John Dewey

"Education, therefore, must begin with a psychological insight into the child's capacities, interests, and habits."

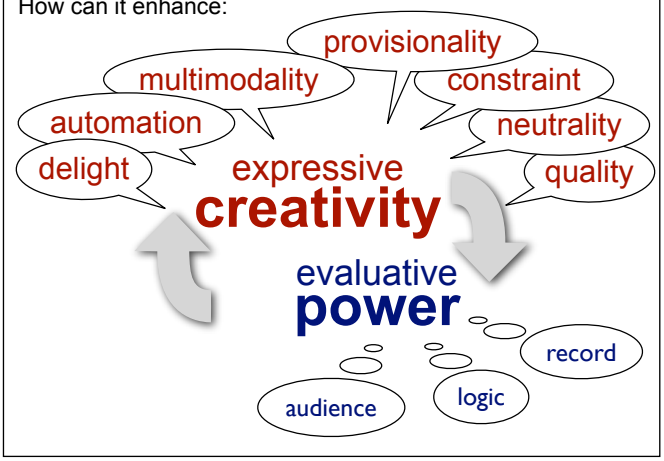
Learner

"If we eliminate the social factor from the child we are left only with an abstraction; if we eliminate the individual factor from society, we are left only with an inert and lifeless mass."

from 'My Pedagogic Creed' School Journal vol. 54, pp. 77-80 (January 1897)



Two tests for learning with ICT
How can it enhance:



delight

The computer frequently pleases, aesthetically and affectively, in a way that delights the learner. This positive mood is clearly valuable to creativity, as a means of sustaining motivation at the very least.

http://blog.richardmillwood.net/2008/05/15/an-analysis-of-delight/

automation

A powerful spur to more complex expressions of ideas is the ability to re-express cheaply and repetitively. The potato print transforms a simple shape into a rich pattern, the 'automation' provided by this simple tool allows a variety of re-arrangements of the shape to be explored at low cost and with reliable quality.

Computers provide this kind of automation and much more, through copy and paste in almost every program, through formulae and 'Fill down' in a spreadsheet and, most important of all, through programming languages.

multimodality

The capacity for learners to use multiple media through ICT increases the opportunity to work in alternate modalities to the predominant reading and writing. ICT simplifies the production of visual and aural media as well as making viewing and listening a more delightful engagement with material. Of even greater consequence is the potential for reconstruction in film, hypermedia (the establishment of networks of knowledge) and linear presentations. These are integrations of multiple media and are perhaps the most demanding of communications, not only anticipating audience viewing but also audience choice of sequence.

provisionality

In order to embark on any piece of work of substance, a start has to be made – for many learners, making this start is difficult because making mistakes has such a disastrous effect on continuation. Many young people in schools use correction fluid to eradicate ‘errors’ as they perceive them, or resort to ripping pages out of books in order to achieve a ‘perfect’ copy. Provisionality is that certain knowledge that with a computer, one can begin developing ideas and, at little labour cost, perfect and re-draft those ideas with no evidence of the process. This means that for creativity, one can start recording ideas out of order, in draft form and incomplete. For many, this knowledge unlocks their ideas, which would otherwise not be worth expressing.

constraint

ICT tools can promote the development of ideas, paradoxically, by constraining the universe of possible expressions. In many of the arts, the choice of constraint can lead to greater fertility by focussing on specific aspects of ideas – this kind of limit can offer similar gains in ICT. In graphic programs, limits on the position of the cursor to a grid can lead to the rapid development of diagrams. In geometry programs in Maths, constraints can help learners see important connections and propose new interpretations of figures.

neutrality

After some acquaintance with computers over a period of time, young people see through any pretence of intelligence or life in a computer and thus begin to see it as a neutral tool which although it may offer canned feedback, is clearly incapable of judgement. Computers allow students to ‘say things out loud’, but without judging those things in an interpersonal manner. The computer is a silent helper in this sense and can be trusted with half-formed ideas and ideas which follow the students creative impulse.

quality

ICT media are unique in that little imprint of the creator’s weakness in production are seen – perfect fonts, geometric accuracy and colour faithfulness permit the weakest of learners to produce material which compares, on the level of media quality, with that of the most experienced professional. This means that learners’ self-esteem, which is so heavily knocked by poor handwriting, inaccurate drawing or inadequate oral skills, can be raised. This in turn encourages risk-taking and attention to the content of ideas – continuing engagement which can lead to judgements about higher-order issues on a level playing field.

Most work on a computer can be saved for later perusal or saved at intervals to record drafts. In the development of ideas this can help learners see how their ideas have developed, or peers and teachers to understand and judge their value and originality. In the long term, work that has been saved in this way and compiled provides a portfolio of work. This portfolio can be used to represent the learner's capability, but also may be mined for new starting points by that learner in a much more accessible and labour saving way than with a traditional portfolio. New connections can be made between past work and present concerns – often surprising insights can be obtained, because ICT has recorded the work and allowed searching and indexing to take place.

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Using projectors or large screens in a classroom context, learners share a knowledge context and background, debate together, seek each other's views and respect diversity but also work towards consensus. The projected computer screen is a focus for representing the current state of the ideas being developed by the class and for judging quality and accuracy of expression.

A wider, but identified audience can be found by publishing material on web pages so that the globe can take part in the evaluation of ideas and work. The power of potential audience to support both expression and evaluation is very real in the mind of the learner and can provide powerful motivational force and raise ambition.

Scope of iPod learning

purposes:
- practical - the student
- vocational - the worker
- educational - the whole person

activities:
- information
- composition
- communication
- collaboration
- movement

technologies:
- desktop (luggable)
- games kit
- laptop
- pda
- phone
- mp3 player

contexts:
- informal learning
- formal learning

augmentation:
- senses
- memory
- performance
- reach

What do we want of learners?

World peace

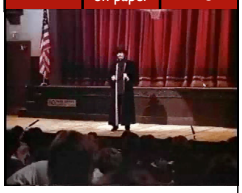
Cultural enrichment

Wealth generation

Citizens

BUT based on what's actually tested in examinations, society appears to need people who:

- Work alone
- Use memory, don't search
- Sit, still, in silence
- Only write, with pen on paper
- Forget!

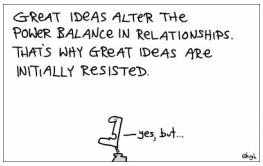


Extract from Saturday Night Live's
Father Guido Sarducci
played by Don Novello
in 'Gilda Live!' (1980) Warner Studios.

concerns:

- creative overview
- access
- barrier (to engagement with tactile)
- regimentation & industrialisation
- interoperability

hang on while I get a photo!



<hindsight >insight< foresight>

National Archive of Educational Computing

www.naec.org.uk

Future Knowledge

www.futureknowledge.org

core education

www.core-ed.org.uk
richard.millwood@core-ed.org.uk
+44 779 055 8641

inter-disciplinary inquiry-based learning
idibl

idibl.bolton.ac.uk

action! >