

(Public Page)

Coding for schools

Games based

- Kodu – Microsoft coding for games. Some materials, see e.g. http://www.interactiveclassroom.net/?page_id=189 – 7 lesson SoW.
- Visual Basic game programming <http://www.youtube.com/playlist?list=PL68376C48B4696FA2> (set of videos, youtube license)
- <http://www.alice.org/> - 3d programming env to create a story/game with teaching materials (not CC)
- GameStar Mechanic – game-based platform to teach game design, free (with a premium option) but not CC. With teaching resources <https://sites.google.com/a/elinemedia.com/gsmlearningguide/home>
- PyGame <http://www.pygame.org/wiki/tutorials> - tutorials for games written in Python

Robot based

- Lego <http://mindstorms.lego.com/en-us/Default.aspx>
- StarLogo TNG <http://education.mit.edu/projects/starlogo-tng> next generation Logo interface with curriculum materials <http://education.mit.edu/projects/starlogo-tng/learn> (CC?)

Web Design based

- Mozilla webmaker – building a community effort to push coding <https://wiki.mozilla.org/Webmaker>, very much non-traditional <http://commonsense.wordpress.com/2011/09/12/mozilla-as-teacher/>
- <https://thimble.webmaker.org/en-US/> - Mozilla thimble, allows you to edit CSS/HTML on one side, and see the page on the other

Mathematics based

- Computer Based Mathematics, and examples <http://demonstrations.wolfram.com/>
- GeoGebra – at lower levels, commands, but can build these into scripts see e.g. http://wiki.geogebra.org/en/Tutorial:Introduction_to_GeoGebraScript

App based

- <http://teach.appinventor.mit.edu/> - app inventor. No coding required (drag n drop interface) to create Android apps with sets of curricula resources (creative commons) e.g. course in a box <http://www.appinventor.org/course-in-a-box> , apps4good also uses App Inventor <https://appsforgood.onconfluence.com/pages/viewpage.action?pageId=854029>
- Eclipse SDK - no 'teaching' resources as such that I've found...surprising?
- <http://blogs.msdn.com/b/ukschools/archive/2012/07/03/how-students-can-build-a-window>

[s-phone-app-in-30-days.aspx](#) -Generation App - structured guide (30-day plan) to design, build, test, distribute and monetize apps for Windows Phone. Not 'teaching' per se, nor CC.

Other (e.g. visual coding environments for general use)

- <http://scratch.mit.edu/> - Scratch, (mostly CC), including curriculum guides <http://scratched.media.mit.edu/resources> (lots on web too e.g. <http://www.bmsweb.co.uk/index.php/pupils/year-8-scratch-projects>)
- <http://byob.berkeley.edu/> Build your own blocks. Off-shoot from scratch.
- <http://www.greenfoot.org/door> Greenfoot

Scratch ^ is by far the best known and best resourced.

- <http://www.freetech4teachers.com/2012/08/daisy-dinosaur-visual-intro-programming.html> Daisy the Dinosaur free ipad app to introduce young students to basics of programming
- EToys - <http://www.squeakland.org/resources/> visual tool, can script drawing for teaching kids basics of code. Resources for teaching (not CC).
- Google, e.g. Google blocky (like Scratch) <http://code.google.com/p/blockly/?redir=1> visual coding environment
- Of course more advanced users could also use google <http://code.google.com/>, and perhaps delve into yahoo pipes, etc (depending on how on the data side they want to be...)
- Raspberry Pi – variety of resources around, including http://elinux.org/Rpi_Education
- Code Academy – submit courses, and learn from them on various languages (and sub-topics) <http://www.codecademy.com/courses/lang/all> (oddly not CC)
- Panther is a programming language aimed at young users with only a small knowledge of programming. Panther offers you a more advanced version of Scratch, a simple programming language developed at MIT. <http://pantherprogramming.weebly.com/> it has a few sample projects showcasing features, but no curriculum materials (see <http://pantherprogramming.weebly.com/panther-tutorials.html>)
- Fun programming uses videos (CC) to illustrate programming on 'Processing' language <http://funprogramming.org/>
- <http://python4kids.wordpress.com/> - python for kids, raspberry pi, minecraft, etc.
- <http://waterbearlang.com/> - visual packaging for a range of coding languages?

Clubs

<http://coderdojo.com/about-us/> - grassroots volunteer clubs setup to teach coding in spare time (Ireland)

Raspberry Jam

Accreditation/awards/prizes/etc

Badges (CoderDoJo has some & Mozilla Open Badges)

Curated lists

<http://www.scoop.it/t/coding-for-kids>

(I've looked at this list, as of 12/07, I love scoop.it, but I wanted a way to organise the links into categories. The list also has a set of resources which, while useful, don't fit the remit of this one).