



Subject Resources for Teachers

These resources have been compiled by CTYI instructors and are designed to provide a starting point for teachers of gifted and talented students.

Please note that the websites are subject to change and so any internet access by students should be properly supervised. This is particularly important in relation to the sites listed for Forensic Science.

Teaching Strategies

Koshy, V. (2002). Teaching Gifted Children 4-7 - A Guide for Teachers. David Fulton: London

Tomlinson, C.A. (2001). How to Differentiate Instruction in Mixed-Ability Classrooms (2nd Ed.) ASCD: Virginia

Tomlinson, C.A. (1999). The Differentiated Classroom - Responding to the Needs of All Learners. ASCD: Virginia

Hymer, B., Michel, D. (2002). Gifted and Talented Learners - Creating a Policy for Inclusion. David Fulton: London.

Age Appropriate Literature

Books aimed at 10+, suitable for 7/8+

- A Wrinkle In Time - Madeleine L'Engle
- Starring Sally J Freedman As Herself - Judy Blume
- Otherwise Known As Sheila The Great - Judy Blume
- Blubber - Judy Blume
- The School Story - Andrew Clements
- Charlotte Sometimes - Penelope Farmer
- What Katy Did - Susan Coolidge
- What Katy Did At School - Susan Coolidge
- Number The Stars - Lois Lowry
- From The Mixed-Up Files of Mrs Basil E Frankweiler - E L Konigsburg
- The Cat Ate My Gymsuit - Paula Danziger
- Freaky Friday - Mary Rogers
- Chinese Cinderella - Adeline Yen Mah
- Amelia - Siobhán Parkinson
- The Phantom Tollbooth - Norton Juster

Books aimed at teenagers, suitable for 9/10+

- Fifteen - Beverly Cleary
- Walk Two Moons - Sharon Creech

- Catherine, Called Birdy - Karen Cushman
- Dustbin Baby - Jacqueline Wilson
- Jacob Have I Loved - Katherine Paterson
- Faraway Home - Marilyn Taylor
- 4 Kids, 3 Cats, 2 Cows, 1 Witch (Maybe) - Siobhán Parkinson
- Break Point - Rosie Rushton
- I'm Alice (I Think) - Susan Juby
- Instant Sisters - Rose Impey
- Fat Chance - Leslea Newman
- Stargirl - Jerry Spinelli
- I Capture The Castle - Dodie Smith
- Teen Idol - Meg Cabot
- Tall, Thin and Blonde - Dyan Sheldon
- The Princess Bride - William Goldman
- Find A Stranger, Say Goodbye - Lois Lowry
- Midnight - Jacqueline Wilson
- Pillars of Fire - Michael Mullen

Animation

For Animation Lovers - A great site packed with activities showcasing their movies such as Shrek and Chicken Run. <http://www.dwkids.com/>

Astronomy

NASA "for kids" site <http://www.nasa.gov/audience/forkids/kidsclub/flash/index.html>

<http://www.education.nasa.gov/home/index.html>

<http://www.minds.nuim.ie/~underdog/Astro>

www.space.com This is great for up-to-the-minute astronomy news.

<http://antwrp.gsfc.nasa.gov/apod/astropix.html> This is the NASA astronomy picture of the day. Always worth a look!

Astronomy: A Self-Teaching Guide by Dinah L. Moche

Available on Amazon.com <http://www.amazon.com> (~\$1.77 - posted from the US)

Yearbook of Astronomy by Sir Patrick Moore
Available on Amazon.com <http://www.amazon.co.uk> (~£10)

Comment from the Instructor:

The yearbook is more technical than the other stuff I've mentioned here, but it is insanely useful if you're doing any kind of serious stargazing, because it gives full details on anything interesting appearing in the night sky for the next year. But again, bear in mind it is slightly more technical than the other stuff here.

Astronomy and Space Magazine (€4.50)

Comment from the Instructor:

This is a very good magazine produced for Ireland and the UK. The articles cover almost everything there is to know about astronomy, and each month publishes the latest star-maps. You can also subscribe to their website at <http://www.astronomy.ie/> A subscription gives you membership of Astronomy Ireland, who run lots of really good events throughout the year, from observing sessions (having your own telescope isn't necessary to go to those - they have telescopes for general use, and everybody is usually so friendly and enthusiastic that they're dying to show you theirs!), to lectures (which also take place in DCU) to "star-b-q-ues". You can attend most of these events even if you're not an official member - they advertise them all in the magazine or on their site. They also sell telescopes, and are always prepared to give advice to beginners.

Computer Programming

Scratch

Ideal for primary school children aged 5 to 11 years. Free downloadable programme. The Support section on the homepage contains numerous help sections. The programme is also available in several languages, accessible through the support section.

<http://scratch.mit.edu>

Squeakland

For students aged 12-17 or for those who have mastered Scratch, Squeakland is the natural follow on course. This is a free to download programme. The 'What is Squeak?' section contains tutorials and quickstart tabs on the top of the page.

Book Reference: "Squeak: Learn Programming with Robots (Technology in Action)" by Stéphane Ducasse

<http://www.squeakland.org>

Engineering

Fundamental Physics by Caserly & Hogan

Leaving Certificate Physics by Dan O Regan

Or any Leaving Certificate Maths Book!

<http://www.steps.ie>

<http://www.eng-tips.com>

<http://www.asme.org/education/precollege/bestpractice/bp.htm>

<http://www.pbs.org/nova>

<http://www.eweek.org>

<http://www.howthingswork.com>

<http://www.intel.com/education/design/>

http://questdb.arc.nasa.gov/lesson_search.htm#search

<http://www.nationalgeographic.com/education/>

<http://www.nsf.gov/od/lpa/events/fow/start.htm>

<http://www.engineeringk12.org/>

<http://www.webmonkey.com>

<http://www.howstuffworks.com/>

The Discovery Channel provides a wealth of engineering programming including:

- Mega Machines
- How its Made
- Myth Busters
- Extreme Engineering
- Super Structures

I would recommend that students should tinker around with computer languages such as C, C++, HTML, JAVA and PHP. To learn any of these languages I would recommend that the student purchase a copy of BURKS (The Brighton University Resource Kit for Students) it contains 4 CD's that teaches the student everything from the architecture of the computer to all of the various languages in easy to follow step by step exercises.

Information on BURKS is available from <http://burks.brighton.ac.uk/burks>

Bridges

Arthur Ravenel Bridge, Charlestown, South Carolina

Read about the process of bridge construction, and how two older bridges, which it replaced, were taken down.

<http://ravenelbridge.net>

Building BIG

Try engineering a bridge yourself!

<http://www.pbs.org/wgbh/buildingbig/index.html>

Millau Biaduct Project, Millau, France

Read all about how this project was brought from it's plans and the problems it encountered in crossing the valley.

<http://www.a75.com/viaducengl.html>

<http://www.viaducdemillau.com> (this page is in French, but the site contains fantastic photographs of the bridge.

Forensic Science

*Although many of these sources claim that they are suitable for children, not all are. Parental supervision is advised.

<http://www.nifs.com.au/home.html>

<http://school.discovery.com/lessonplans/>

<http://puzzlemaker.school.discovery.com/CrissCrossSetupForm.html>

<http://www.monroecounty.gov/org335.asp?orgID=335&storytypeid=&storyID=&>

http://www.courttv.com/forensics_curriculum/msunit1.pdf

http://www.courttv.com/forensics_curriculum/unit1.pdf

http://www.courttv.com/forensics_curriculum/unit2.pdf

<http://www.accessexcellence.org/AE/ATG/data/released/0157-theasinclair/description.html>

<http://projects.edtech.sandi.net/kearny/forensic>

<http://www.accessexcellence.org/AE/AEPC/WWC/1993/who.html>

http://www.courttv.com/forensics_curriculum

<http://www.a-s.clayton.edu/hampikian/forensic>

<http://www.mnsu.edu/emuseum/biology/forensics/index.shtml>

Giftedness & Talent Resources

A good book about gifted kids http://www.nwrel.org/msec/just_good/9/toc.html
(Available to download)

A good website containing information on giftedness and talent
<http://ericec.org/digests/e524.html>

Books on Giftedness
<http://www.onestopeducation.co.uk/icat/sengiftedandtalented>

Good resource guide
<http://www.kidsource.com/kidsource/pages/ed.gifted.html>

General Science

BBC Website is a fantastic online resource with information stores plus world class articles, flash tutorials and quizzes for all ages. In particular it's Science and Nature website is excellent.
<http://news.bbc.co.uk/2/hi/science/nature/default.stm>

Mathematics

The Number Devil
Available from Easons (€10.42)

Murderous Maths series
Available from Easons (€7.44 each)

www.cut-the-knot.org

www.murderousmaths.co.uk

For prime numbers: <http://primes.utm.edu/>

For Fibonacci series: www.mcs.surrey.ac.uk/Personal/R.Knott/Fibonacci

Marine Science

The Blue Planet with David Attenborough (BBC series)

Available from www.bbcshop.com (£7.96, currently on offer)

American National Oceanic and Atmospheric Administration (NOAA): www.noaa.gov

Race Rocks Project www.racerocks.com

Allows a window into Canada's first marine protected area. If the student has access to broadband internet, they can watch live video from the island, 7000 km away.

Mythology

The Greek Myths, Vol. 1 & 2 by Robert Graves.

New York: G. Braziller, 1955, London: Cassel, 1958. (many editions)

The Celtic Heroic Age (4th ed) by John T. Koch and John Carey (eds.)

Malden, Massachusetts: Celtic Studies Publications, 2003.
(ISBN 1891271091)

Myths and Symbols in Pagan Europe: Early Scandinavian and Celtic Religions by Hilda

Davidson and Roderick Ellis
ISBN=0815624417.

Sophie's World, trans. Paulette Moller (1994), by Jostein Gaarder

London: Phoenix, 1995.

Fantasia (Walt Disney Video) (1940) Directed by Ben Sharpsteen and others.

Hercules (Walt Disney Video) (1997) Directed by John Muskers & Ron Clements.

<http://www.mythweb.com/>

<http://www.ancienttexts.org/library/celtic/ctexts/>

<http://www.ugcs.caltech.edu/~cherryne/mythology.html>

Nature

The National Geographic Website is an excellent link for Natural History Enthusiasts and Wanderers!

<http://www.nationalgeographic.com/kids/>

Keeping in the theme of Natural History.....one of the worlds premier institutions has a website to match!

<http://www.nhm.ac.uk/kids-only/index.html>

Psychology

You can't use your brain if you're a jellyfish by Fred Ehrlich
(ISBN: 1593540906)

Understanding your brain by R. Treays
(ISBN: 0746020147)

Incredible You: 10 Ways to Let Your Greatness Shine Through by Wayne Dyer, Kristina Tracy, Melanie Siegel (Illustrator)
ISBN: 1401907822

Adam's Alternative Sports Day: An Asperger Story by Jude Welton
ISBN: 1843103001

Thinking Games for Kids by Cheryl Gerson-Tuttle, Penny Hutchins Paquette
ISBN: 0071455426

Questions for Kids: A Book to Discover a Child's Imagination and Knowledge by Michael Smith
ISBN: 0966943716

Writing

www.teenwriting.com:

This is a great website covering pretty much every genre and aspect of writing. It is aimed at young adults and has linked to other similar sites. The students found anything from it very useful.

<http://www.onestopenglish.com>

This site was written for teachers and is aimed at young children as well as teenagers.

<http://www.qca.org.uk/12571-13445.html>

This site is a teaching resource which I used for King Arthur but it does include ideas for other options. It has lesson plans, links and ideas on how to organise material, really helpful. The site contained a translation of a medieval text, [Sir Gawain and the Green Knight](#) which the students really enjoyed. It was challenging and had a different perspective on King Arthur to what we were doing.

www.kingarthursknights.com

This is a website about King Arthur aimed at young adults and it was helpful information resource.

Inside Stories (1994), edited by Peter and Susan Benton

Comment from the Instructor:

This is a series of four books covering a range of stories, poems and drama. It is fantastic due to the range of material available, diagrams and exercises at the end of each extract for students to write their own material. I would recommend these books, great for the classroom and individual work.

Emma by Jane Austen

The War of the Worlds by H.G Wells

The Light Fantastic Soul Music by Terry Pratchet

Irish Poetry for Young People edited by Bridie Quinn

Zoology

Google encyclopaedia Animal (DK Publishing)
Available from Easons (€ 25)

Animal - The Definitive Visual Guide to the Worlds Wildlife (DK Publishing)
Available from Easons and most other book shops (€ 40)

Rainforest by Sara Oldfield (New Holland Publishers (UK) Ltd.)
Available from Easons and most other book shops (€30)

The Blue Planet - A Natural History of the Oceans by A.Byatt, A.Fothergill, M.Holmes
(BBC Worldwide Ltd. Publishing)
Available from Easons and most other book shops (€ 30)
(BBC DVD Series)

The Life of Birds (BBC DVD Series)

The Blue Planet (BBC DVD Series)

The Life of Mammals (BBC DVD Series)

Life in the Undergrowth (BBC DVD Series)

All available from www.bbcshop.com and/or www.amazon.co.uk

<http://www.animal.dke-encyc.com>

History

National Library of Ireland (NLI)
Kildare Street,
Dublin 2.

National Photographic Archive (NPA)
Meeting House Square,
Temple Bar,
Dublin. 2.
Website: www.nli.ie

National Archives of Ireland (NAI)
Bishop Street,
Dublin 8.

Website: www.nationalarchives.ie

National Museum of Ireland,
Archaeology & History,
Kildare Street,
Dublin 2.
Website: www.museum.ie

Public Record Office of Northern Ireland (PRONI)
66 Balmoral Avenue,
Belfast,
BT9 6NY.
Website: www.proni.gov.uk

Irish Labour History Society Museum
An Cumann Stair Lucht Saothar na hEireann
Beggars Bush Barracks,
Haddington Road,
Dublin 4.
Website: www.ilhsonline.org

Library Ireland: Irish books online
Offers an expanding collection of out-of-print books and other rare Irish material.
Website: <http://www.libraryireland.com/>

Celt: Corpus of Electronic Texts
CELT is producing an online database of contemporary and historical topics from many areas, including literature and the other arts. The site contains a searchable online database consisting of many contemporary and historical texts.
History Department,
University College,
Cork.
Website: <http://www.ucc.ie/celt/>

Irish History On-Line
The Royal Historical Society bibliography is an authoritative guide to what has been written about British and Irish history from the Roman period to the present day. The Bibliography is hosted by the Institute of Historical Research, which is part of the University of London.
Website: <http://www.rhs.ac.uk/bibl>

Scoilnet: Portal for Irish Education
www.scoilnet.ie

American Memory,
Library of Congress,
101 Independence Ave, SE
Washington, DC 20540.
Includes a comprehensive introduction to primary sources and the techniques for analysing them. The 'Learning Page' includes useful teacher notes and student handouts.
Website: <http://memory.loc.gov/learn/>

Internet Modern History Sourcebook,
History Department,
Fordham University,
Lincoln Campus, New York, NY, 10023.

The *Internet History Sourcebooks* are collections of public domain and copy-permitted historical texts presented cleanly (without advertising or excessive layout) for educational use. Website: <http://www.fordham.edu/halsall/mod/modsbook.html>

History Matters

Students are helped to make sense of a wide range of primary sources and their use by professional historians. Includes interactive exercises and a guide to online sources.

Website: <http://historymatters.gmu.edu/browse/makesense/>

Internet Women's History Sourcebook

History Department,
Fordham University,
Lincoln Campus, New York, NY, 10023.

This *Sourcebook* attempts to present online documents and secondary discussions that reflect the various ways of looking at the history of women within broadly defined historical periods and areas.

Website: <http://www.fordham.edu/halsall/women/womensbook.html>

Spartacus: Teaching History On-line.

Includes monthly guides to using the Internet to teach and study history, including news and links to useful websites.

Website: <http://www.spartacus.schoolnet.co.uk/history.htm>