

Resources

This document contains three sections:

- An overview of games genres and rating
- Supporting reading
- Examples of the use of games in the classroom

Genres and ratings

There are multiple game genres that can be used in different ways within the classroom. The following is an overview of the theory around games-based learning, game genres, and how games are currently used.

Game genres

Genre	Examples	Brief description
Action adventure	Tomb Raider, Finding Nemo, Shrek	Having to control a character who has to solve puzzles or tasks in order to complete a pre-defined mission
Adventure	Monkey Island, Broken Sword	Being assigned roles and then completing a pre-defined mission based on puzzle-solving
Creative games	LittleBigPlanet	These are somewhere between an adventure/platform game and a sandbox for making things
MMO (massively multiplayer online games)	World of Warcraft	Interacting with lots of people from all over the world playing the same game at the same time via the internet – often working together to meet shared goals
Platform games	Super Mario	The goal is to race to the finish passing through various levels and often jumping from platform to platform avoiding enemies and collecting points to gain skills or enter other areas
Casual games	Tetris, Zoo Keeper, Cbeebies online games, miniclip	Intuitive, accessible and easy to play, usually available on handheld consoles or PC via the internet often involving puzzles and quizzes or Wii games

Edutainment (educational games)	Global Conflict: Palestine, Zoombinis	Games with the primary intention of learning
Role playing games	Final Fantasy	Involving turn-based combat, strategy, and worlds to explore, often fantasy
Rhythm/action games	Guitar Hero, Singstar, Dancemat	Requiring dancing, singing or playing music rhythmically according to instructions with the challenge of being awarded a score
First person shooter, shoot 'em up and fighting games	Street Fighter, Grand Theft Auto	Fighting or shooting objects and other game characters, often having to memorise button combinations and requiring fast reactions
God games	The Sims, Black & White	Where the player controls the environment in addition to characters.
Simulations	Microsoft Flight Simulator	Simulations of real activities
Racing games	Burnout, Gran Turismo	Having to act as the driver and race against others or complete driving courses within a set time – the courses can be realistic or fantastical
Sports	Championship Manager or Tiger Woods Golf	Participating in the sport or acting as the manager in a situation mimicking real-life competitive activities
Active technology/fitness games	Wii Sports, and Wii fit	Physically taking part in the exercise/activity
Strategy	Age of Empires, Command & Conquer	Having to plan the next move to beat the opponent, often requiring quick thinking
Self improvement games	Brain Training DS	Activities to improve mental, and sometimes physical outlook
Serious games	Operation Climate Control	Focus on achieving a learning outcome rather than being purely for pleasure; would include all 'edutainment' games

Game ratings

In June 2009 the British Government decided to adopt the Pan-European Game Information (PEGI) age rating system. It was launched in 2003 to replace some national age rating systems. The categories games are now as rated are 3+, 7+, 12+, 16+ and 18+.

PEGI also rates casual online games; if they have a marker PEGI OK it means the games fulfil the 3+ criteria. It will replace the BBFC ratings which were used by 4% of games in the UK. These categories correspond to film ratings, namely: U, PG, 12, 12A 15, 18 and 18R. In the US the ratings are awarded by the Entertainment Software Rating Board (ESRB). The categories are: EC – Early Childhood (3+), E – Everyone, E10+ – Everyone (10+), T – Teen (13+), M – Mature (17+), and AO – Adult Only (18+).

Readings

Games in the classroom (policy report)

10 pages

http://www.futurelab.org.uk/resources/documents/project_reports/becta/Games_and_Learning_policy_report.pdf

This is a concise summary of the main debates around games and learning. Written for policy makers it identifies significant ambiguities or evidential absences that should be considered in any serious attempts to understand the role of computer games in children's learning.

Games in the classroom

Podcast duration : 14 min

Transcript: 5 pages

http://media.futurelab.org.uk/podcasts/becta_talks/games/

In this podcast, Futurelab's Ben Williamson and Martha Wright discuss how computer games are being used in the classroom, and the benefits and challenges of using games to enhance the curriculum.

Dr Ben Williamson on computer games and education

Podcast duration: 22 minutes

Transcript: 9 pages

Dr Ben Williamson focuses on competing arguments about the role of computer games in supporting educational goals. In particular, he concentrates on how games are often used to reinforce ideas about work in a 'high tech' economy and the role of education in producing human capital for the labour market, as well as on how this interest in games risks making education seem like another form of consumerism. This presentation was part of the Becta Research Conference 2008 in Sheffield.

A full report on this area is the **Games and Learning Educators report** (45 pages). It was written for teachers and is based on research about current game use and the reasons for, or not, using games in the classroom:

http://www.futurelab.org.uk/resources/documents/project_reports/becta/Games_and_Learning_educators_report.pdf

Ollie Bray is a Secondary head in Scotland. <http://www.olliebray.com/> - look for the article **Computer Games in Secondary Schools** – BETT 2010 posted 17th Jan 2010.

Chapters 2 and 3 in **'Digital games in schools – A handbook for teachers'** (8 and 10 pages) http://games.eun.org/upload/GIS_HANDBOOK_EN.PDF.

For a background on European usage and issues raised read all of **'Digital games in schools – A handbook for teachers'** (46 pages) http://games.eun.org/upload/GIS_HANDBOOK_EN.PDF. This handbook has been written as part of the European Schoolnet's Games in Schools project (2008-2009). The project's aim was to analyse the current situation in eight countries (Austria, Denmark, France, Italy, Lithuania, the Netherlands, Spain and UK) with regard to games based learning. The handbook is a practical guide aimed at teachers designed to provide theoretical and practical information.

Examples of how games are being used in classrooms throughout the UK

Primary

Oakdale junior school (DS) Redbridge

<http://www.gamebasedlearning2009.com/conference/speakers/907-speakers/182-dawn-hallybone-ict-co-ordinator-oakdale-junior-school-london-borough-of-redbridge>

Profile of Dawn Hallybone, ICT subject leader and a Year 6 teacher at Oakdale Junior School in East London. She talks about how she introduced games-based learning, specifically using consoles, into her school.

She also has a blog with links to games and examples of their use – <http://hallyd.edublogs.org/>

<http://www.guardian.co.uk/classroom-innovation/good-at-games>

<http://www.guardian.co.uk/classroom-innovation/online-games-school>

Guardian articles about mobile and games based learning, including some of the work being done at Oakdale Junior School in East London. The article looks at the introduction of Nintendo DS consoles into the classroom describing how they are used and shared in the school.

High Halden Church of England Primary School Kent

<http://www.teachernet.gov.uk/schoolinfocus/highhaldenchurchofenglandprimaryschool/>

Feature describing the work being done at High Halden around improving access to ICT, how it is funded, types of hardware and software being used and how using ICT is helping to improve core subject areas such as literacy.

Sycamore Junior school Nottingham (Mathematics)

<http://www.ictopus.org.uk/downloads/sqp/SGP94.pdf>

The article includes a case study looking at Sycamore Junior School where they are using the online programme 'Mathletics' to support numeracy in the curriculum. There is also an in-depth discussion of 'Myths and legends' a programme designed to promote and support literacy and history at KS2/3 as well as a teacher describing how she thinks social media can be introduced to the classroom.

Blue Coat school Birmingham (Mathematics)

http://www.agent4change.net/index.php?option=com_content&view=article&id=490:dont-miss-bett-2010-mathematics&catid=95:subjects&Itemid=469

A review of four digital and games based maths programmes designed to promote and support literacy From KS1 to 5. These include 2Simple's *Maths City 1* and 2, *Mathletics* from 3P Learning, *I am Learning* and the yet to be launched *SMART Notebook Maths Tools*.

Consolarium: Overview by Derek Robertson

Duration: 45 minutes

<http://www.gamebasedlearning2009.com/proceedings/video/905-video/211-derek-robertson-learning-a-teaching-scotland>

This is a presentation from the 2009 Games-based learning conference looking at the use of games in Scotland.

Consolarium: Guitar Hero case study

<http://www.ltscotland.org.uk/sharingpractice/g/guitarhero/introduction.asp?strReferringChannel=usingglowandict&strReferringPageID=tcm:4-478011-64>

Comprehensive case study around using Guitar Hero in the classroom to support learning across the curriculum in a study conducted by Learning and Teaching Scotland.

Consolarium: Dr Kawashima's Brain Training case study

<http://www.ltscotland.org.uk/sharingpractice/i/improvingmentalmaths/introduction.asp?strReferringChannel=search&strReferringPageID=tcm:4-615801-64>

This is an overview of how this commercial game is being used in Scotland to improve mental mathematics. It consists of text and videos.

Consolarium: Myst case study

<http://www.ltscotland.org.uk/sharingpractice/m/myst/introduction.asp?strReferringChannel=usingglowandict&strReferringPageID=tcm:4-478011-64>

Looking at how a game called Myst III Exile has helped improve writing in the classroom including methods and results of a study conducted by Learning and Teaching Scotland.

Tim Rylands

Duration: 28 minutes

<http://www.gamebasedlearning2010.com/video/905-video/235-tim-rylands>

Video of a presentation given by Tim Rylands at the 2010 Games-based learning conference around using games in the classroom, uses, benefits etc.

Andrew Davies (HT at Clunbury Junior School)

<http://news.bbc.co.uk/1/hi/england/shropshire/7466575.stm>

Short BBC Article describing the use of Nintendo DS consoles at Clunbury Junior School in Shropshire. Andrew Davies (HT at Clunbury Junior School) was the ICT Excellence Awards Best Whole School winner 2007 for good early use of Nintendo Brain Training.

Secondary

Thomas Bennett Community College Crawley

<http://www.thomasbennett.org.uk/content/ict.html>

Describing the range of ICT options in the school, including how they are offering a Computer Games Authoring unit in Years 10 and 11, equivalent to a GCSE, using Game Maker 7.0 which is available as a free download. There is also information on how ICT has been incorporated into the Sixth Form curriculum as well as improving access in the school and increasing the available software packages.

Stoke-on-Trent City Learning Centres

<http://citylearningcentre.org.uk/2006/05/08/stoke-clcs-test-3d-gaming-environment/>

Short article on a game-based project called MissionMaker taking place at the centre.

Shireland City Learning Centre

<http://www.shirelandclc.co.uk/easterschool.php>

Featuring games authored by students focusing on KS2 Maths using Flash and Podcasts etc.