

Teaching with Games

Using commercial off-the-shelf computer games in formal education

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Introduction

- TwG project - part of 'suite' of research into games – and broader possibilities supported by digital technologies
- Focussing on the utility of 'off-the-shelf' commercial computer games for educational purposes?
- 1 year investigation into the use of commercial mainstream games in the classroom - “How are these games used in the real world?”
- Not been done on this scale before



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Why commercial games?

- Media rich, original, engaging content
- Up to date and state of the art
- Dynamic and high speed
- Provides instant feedback
- Multi layered and multi-level
- Flexible and customisable – end user choice
- Draws on incorporates the ‘traditional arts’, sound, visual imagery



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- Discovery and exploration – self regulated
- Collaborative learning and co-operation
- How to use new information and communication resources
- Emerging communities of support and practice and social networking
- Media for expression and representation
- Increasingly scope for user generated content and personalised narratives



Titles

The Sims 2

Knights of Honor

Rollercoaster Tycoon 3

- Rigorous and comprehensive selection procedure
- Supported by work from government and academia



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What we did



Ipsos MORI - Computer Games For Learning - Microsoft Internet Explorer

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Address http://www.mori.com/pubs/2005/futurelab.shtml

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Computer Games For Learning

8 March 2006

NESTA Futurelab, a leading organisation in educational technology, commissioned Ipsos MORI to conduct a survey investigating teachers' attitudes to mainstream computer games as part of their research project *Teaching with Games*, which is funded by Electronic Arts (EA).

This survey revealed that 59% of teachers would consider using computer games in the classroom for educational purposes, and indeed, almost one third have already done so. Apart from being seen as an interactive way of motivating and engaging pupils by half of the teachers taking part in the survey, many more believe that playing mainstream games can lead to improved skills and knowledge. For example, 91% felt that players developed their motor-cognitive skills, while over 50% thought that users would develop their higher order thinking skills and could also acquire topic-specific knowledge.

Technical details

- Fieldwork for the MORI Teachers' Omnibus covered a representative sample of 1,000 primary and secondary school teachers in England and Wales.
- Fieldwork was conducted between 4-25 November 2005.
- Results are based on all respondents unless otherwise stated.
- Data are weighted to the known profile of teachers in England and Wales by sex, age and phase (primary or secondary).
- Where results do not sum to 100, this may be due to multiple responses, computer rounding or the exclusion of don't know/not stated categories.
- An asterisk (*) represents a value of less than half of one percent, but not zero.

Q1 How often do you play computer games in your leisure time? By "computer games" we mean games designed primarily for entertainment, played on PCs, consoles, mobiles and internet browsers.

	%
Every day	2
At least once a week	9
At least once every two weeks	3
At least once every month	5
Less than once a month	10

http://www.nesta.futurelab.org/about_us/press.htm

Start | Ipsos MORI - Comput... | TWS for animation | Microsoft Word | Microsoft PowerPoint | Internet

11:03

ADVICE REQUEST Planning a research project? Click for advice

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- 2 main forms of data collection
- Ipsos MORI polls – teachers Nov 2005, secondary students spring 2006 – attitudes to use of games in education
- 10 case studies in 4 schools - range of locations, curriculum and student intake
- UK and German school systems and range of curricula and subject areas
- Teachers supported but had autonomy around how to use the games, with what students
- Data collection through interviews, observations, focus groups, student data and e-mails, teaching/lesson plans

Three practical questions...

- How can commercial games be used in schools?
- Do students play games as expected?
- Do teachers need to be expert game players to use games in formal education?



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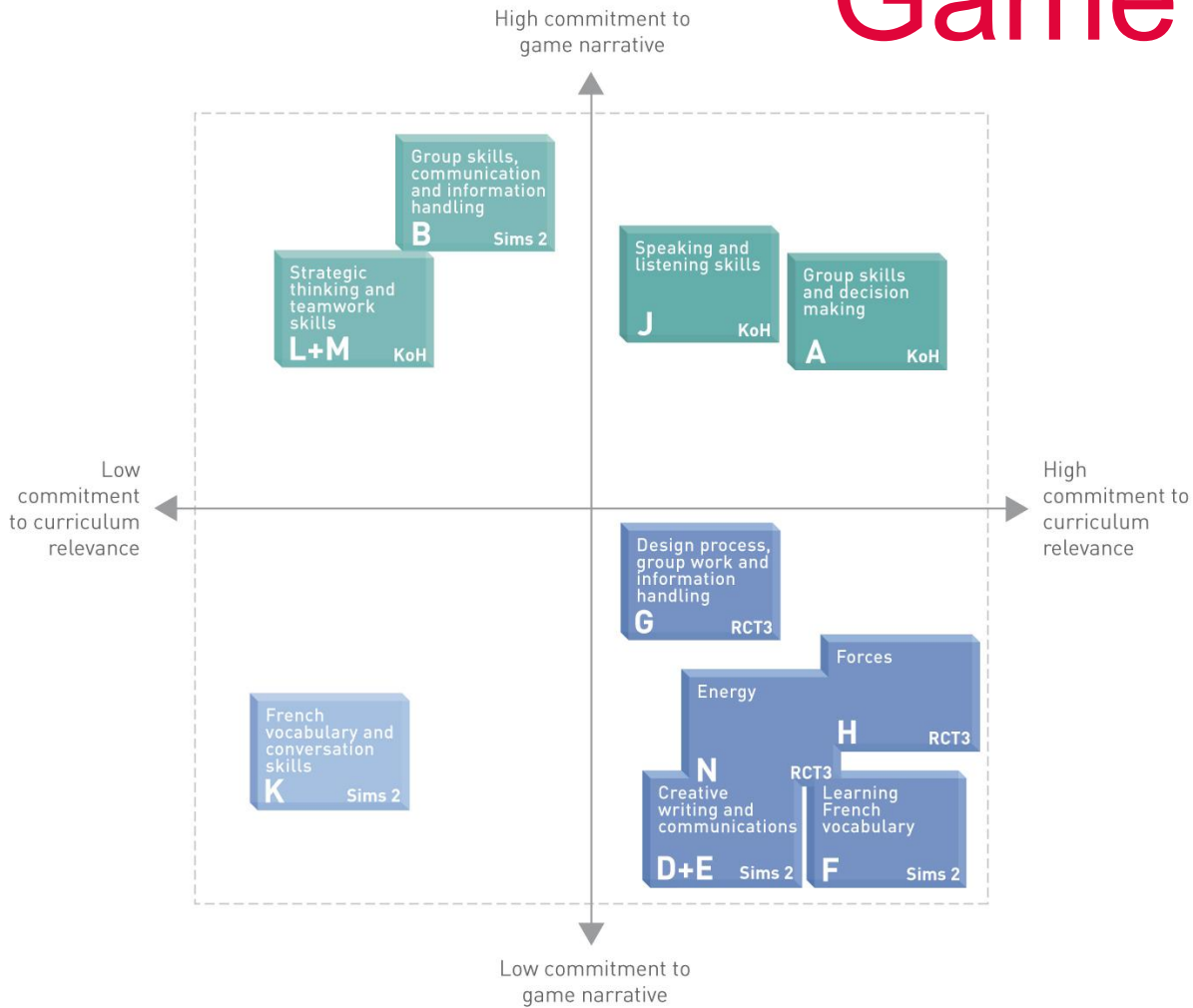


Things that the teachers specifically considered...

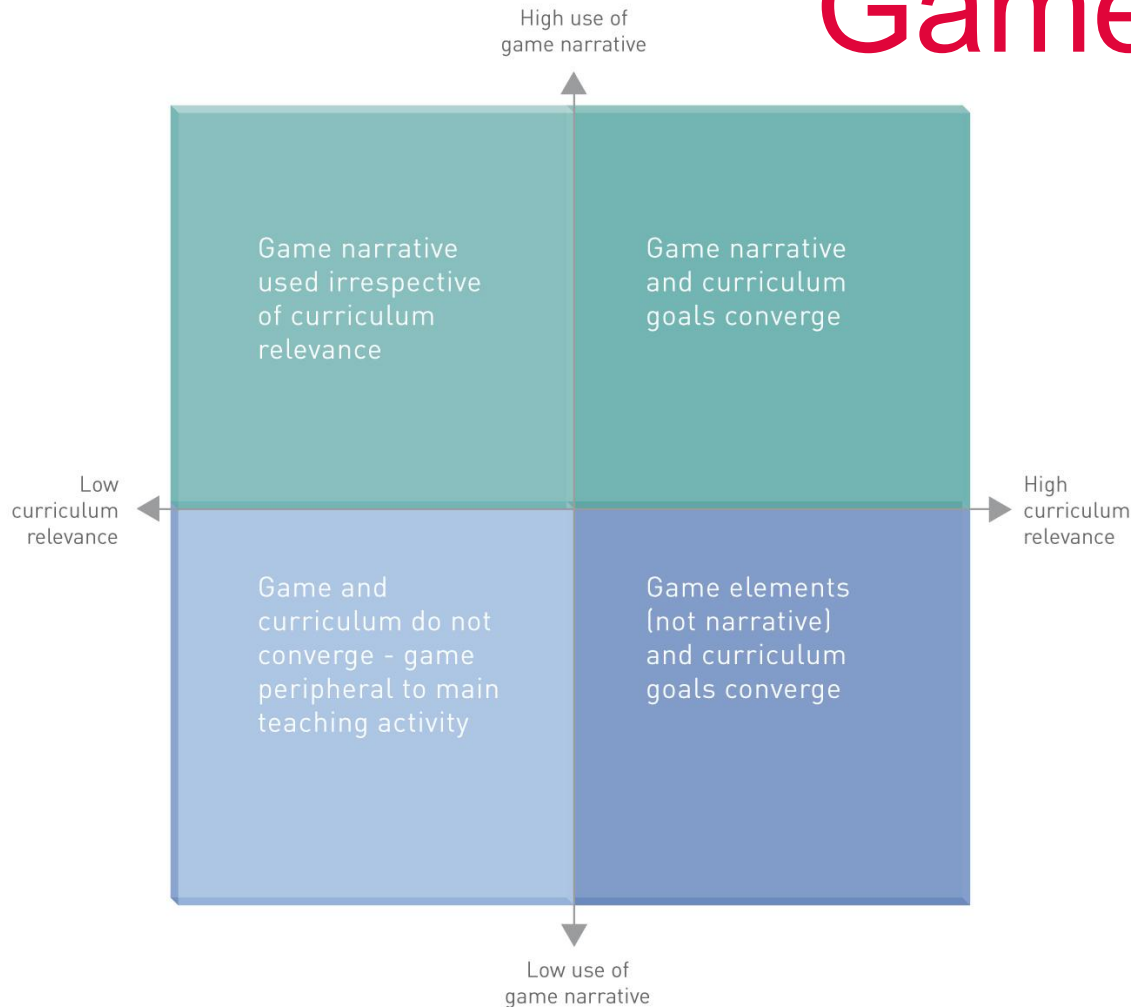
- In the case studies the game use depended upon:
 - Relevance to their curriculum?
 - Sufficient accuracy?
 - Able to be played in time available?



Game usage

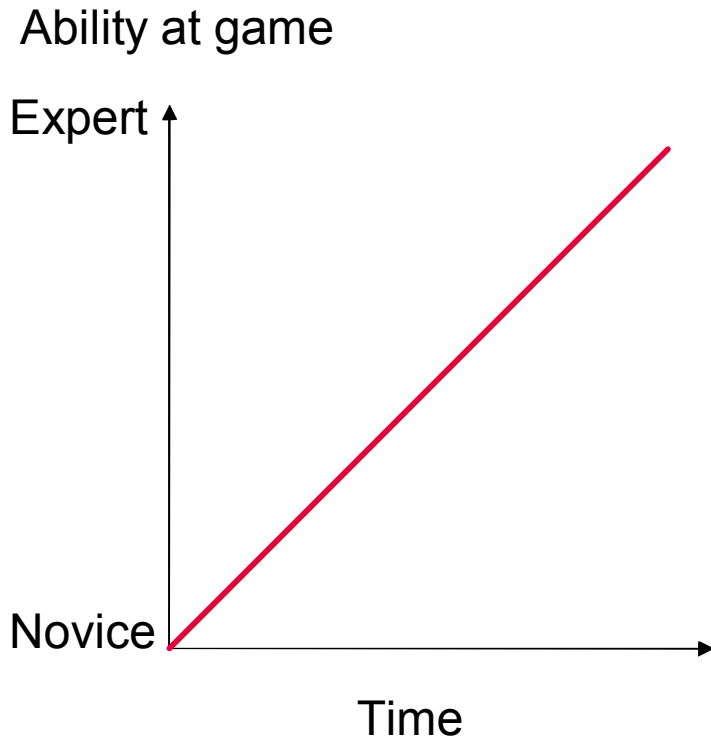


Game usage

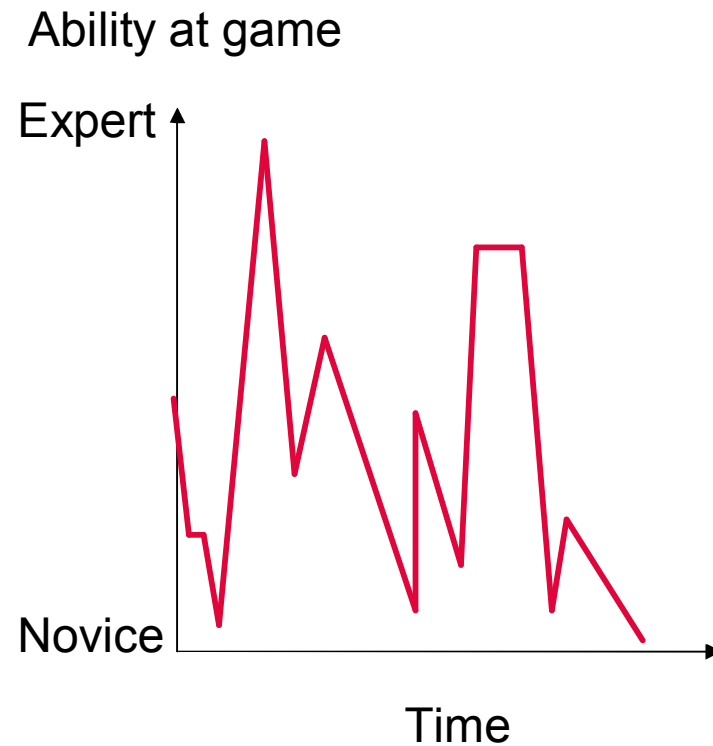


How students play games

Hypothesised



Actual



Teacher expertise...

- How long does it take to learn a game?
- How long do teachers spend preparing lesson plans that use games?
- Would they use games again?



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Wider implications

- What can education learn from games industry and vice versa
- Further disaggregation (and manipulation) of content will become a future direction?
- New markets for games industry – need for greater diversification? more ways into aspects of games – but still technical issues for schools
- Engaging and motivating – but why and how might we produce educational content like this?
- Modelling and simulations - thinking and problem solving skills?
- What do we mean by having ICT skills – confidence with new technologies or ability to apply effectively?



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Further reading

- Final report
<http://www.futurelab.org.uk/research/teachingwithgames/findings.htm>
- Teachers survey
http://www.futurelab.org.uk/research/teachingwithgames/teachers_survey.htm
- Student survey
http://www.futurelab.org.uk/research/teachingwithgames/students_survey.htm
- Teaching with Games: Guidance for educators



Any questions?



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