

## **G5DGAM – Coursework 1**

Games and Learning: Is Shigeru Miyamoto a Constructivist?

**Deadline: 24<sup>th</sup> March 2006, at 3:30 pm**

In his 1982 book on *The Art of Computer Game Design*, game designer Chris Crawford made the seemingly contradictory claim that, "The fundamental motivation for all game-playing is to learn". However, over 20 years later learning is considered a central aspect of game design by a growing number of academics and game designers (e.g. Gee, 2003; Koster, 2005).

Choose two learning theories that come from different learning paradigms (behaviourism, information processing, biological, constructivism, and socio-cultural) and discuss how these theories can be (and/or have been) usefully applied to the design of **non-educational** digital games.

Your essay should include:

1. An explanation of each learning theory, citing its empirical basis outside of game design (including appropriate academic references). [2 x 25 marks]
2. Your justification of the relevance of each learning theory to game design (including academic/professional references and real or hypothetical examples of its application in games). [2 x 25 marks]

A total of 2000 words plus references.

### **Useful starting points:**

- What Video Games Have to Teach Us About Learning and Literacy. James Paul Gee, 2003 (electronic library resource).
- GAPPS: <http://www.academiccolab.org/initiatives/papers.html>
- Kafai, Y. B. (2001). The Educational Potential of Electronic Games: From Games-To-Teach to Games-To-Learn (available online at: <http://culturalpolicy.uchicago.edu/conf2001/papers/kafai.html>)
- The Art of Computer Game Design, Chris Crawford, 1982 (available online at: <http://www.vancouver.wsu.edu/fac/peabody/game-book/Coverpage.html>)
- A Theory of Fun for Game Design, Raph Koster, 2005 (e-library resource)
- Your learning theory course notes!

Good luck,

Jacob

**Your finished essay should be submitted electronically to Jacob Habgood (mph@cs.nott.ac.uk) in Microsoft Word or Adobe pdf format by 3:30pm on the 24<sup>th</sup> March 2006. Late work will be subject to the School's standard penalty of 5% deduction of marks per working day late. This coursework counts for approximately 30% of marks for the module.**