

# Are They Having A Laugh?



Atiti Izogie

# A few 'traits' of children raised with/in/around digital technology

- A desire for instant feedback
- They do multiple things at once
- They find it difficult to concentrate on linear, time-consuming or repetitive tasks, i.e. the traditional method of teaching.
- They have brilliant concentration and engagement capabilities – in fact according to Begg, M., et al 2005: *'players gaming exist within an immersive state of their game world'*
- They are not afraid to make mistakes through experimentation
- They can be motivated to learn at home
- They thrive on visual stimulation

# Education - games / gaming / gameplay

## PIAGET AND VYGOTSKY ON COGNITIVE DEVELOPMENT THEORY

Prior to Piaget's work Children were considered as less competent thinkers than adults

- In a nutshell it explains how a child constructs it's mental model of the world (Piaget, 1952), Piaget asserted that children independently 'meaning make' (children are the scientists), then have actual experiences which provide discrepancies between what they know and what they discover outside of what they know.
- Here emphasis is placed on the role of socio-culture in children's cognitive development (Vygotsky, 1978). Vygotsky asserted that 'community' and 'whole authentic social activities' play a central part in children's ability to 'meaning make' (children are the apprentice). Vygotsky recognised the role of a significant adult here who offers guided learning i.e parents, teachers, etc. through the Zone of Proximal Development and problem based learning

Further reading : *Constructivism and Social Constructivism*

# Education - games / gaming / gameplay

What I have learnt through research:

- A growing practice within education to use games / games based digital apps to teach e.g MyMaths / Mathletics / Questionaut – Adventure (English and Maths) to name but a few. (Kirriemuir, J., et al 2004)
- Contributes towards the development of 21<sup>st</sup> Century Learning Competencies
- Learning through games gaming and gameplay is a sound methodology which facilitates the development of core life skills and emotional intelligence. (Prensky, M., McGonigal, J., and Salen, K.)
- The effective widespread use of games /gaming and gameplay is subject to the stakeholder constraints, and the constraints of the national curriculum as well as teacher / practitioner comfort and confidence in their use. (Kirriemuir,J., et al 2004)
- Motivation is the ‘sine qua non’ of successful learning. Motivated learners can’t be stopped. (Prensky, M)
- The popularity of the games reside in their ability to sustain long term player engagement with challenging tasks. (Begg, 2005 and Gee, 2003)

# EDUCATION - GAMES / GAMING / GAMEPLAY

Gamification is the application of game-like mechanics to non-game entities to encourage a specific behavior.

Game-based learning is simply learning through games.

This means that gamification is first and foremost about encouragement mechanics and the system that promotes them, while game-based learning is first and foremost about the game and its “cognitive residue” (whether from the game’s content, or traditional curriculum).

Both can be used to promote mastery of academic content.

TeachThought

# Education - games / gaming / gameplay

“rich inferential learning takes place as a result of the use of gameplay in education”

(Greenfield, 1984)

- Game Based Learning is the generic name applied to the use of games in education, which is NOT a new phenomenon. Video games draw participants into scenarios which require them to utilise their cognitive awareness and decision making skills... perhaps video games / games are not the enemy if they offer opportunities to engage children in real learning. (Prensky, 2005)
- Games offer socio-cultural, political, economic and technological development (Newman, 2004) and allow for the creation of proactive player communities (Rheingold, 1994)
- Unfortunately the use of games is often poorly translated to learning creating an unfortunate divide in thinking and promotes the belief that learning isn't fun, but games are. Enter the abhorrent phrase 'Edutainment'. Worse still is the fact that games then become hosts to curricular content through embedding. with the belief that games should be used to offer extrinsic motivation. (Begg, M et al., 2005)

# Education - games / gaming / gameplay

In Summary:

- Games / Gaming / Gameplay - Game Based Learning is not new to education
- There similarities between the process of learning and play; if we use the latter to inform the former; practitioners ability to develop coherent game informed learning is increased.
- Games / Gaming / Gameplay offer invaluable engagement fuelled by intrinsic desire and motivation. Game designer have mastered the art of 'player engagement' which promotes endless play and game mastery.
- The learning players when gaming is 'the glue', which keep them progressing and engaged
- Players are bottom liners who want to measure their improvement and progress (leader Board), with a mantra of "If I ain't learning, it aint fun".
- Our old ways of learning promote a short attention span because eit isn't meaningful to them and doesn't offer immediacy (players ROI)

# Education - games / gaming / gameplay

Continued:

- Games /Gaming / Gameplay often have embedded progressive levels of complexity that stimulate motivation and long term engagement.
- Learning through games / gaming / gameplay is learner centred and self directed
- Digital Technology - Games /Gaming /Gameplay is only valuable where it is the best tool for the required teaching and learning
- The Chocolate covered broccoli approach to game informed learning highlights the need for practitioners to reconceptualise what 21<sup>st</sup> Century relevant teaching and learning is an incoherent
- Game Designers and Teachers have a lot in common although game designers have the edge in 'player engagement. Both understand children need: challenge, motivation, activate their ideas and gives opportunity for self-directed learning incklu.



THANK YOU