

PIXELearning®

Games-based business & management skills development



An overview of some of the key sessions from the Serious Games Summit at GDC 2005 in San Francisco

OVERVIEW



The Serious Games Summit

Game Developer Conference 2005 – San Francisco

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Introduction

The SGS consisted on around 30 separate keynotes, case studies, round tables and lectures all of which revolved around the use of game technologies, approaches and techniques for (primarily) non-entertainment purposes.

The audience (est 500+) consisted of people from many different walks of life including game developers, educationalists, training professionals, public agencies, new media/publishing and various industry sectors.

Sessions held on Monday 7th March

A Theory of Fun for Games by Raph Koster (Sony)

Raph's opening statement: "Hi I'm Raph and I am a gamer" resonated strongly with the audience as it illustrated the still prevalent stereotype of gaming as a non-serious activity with no social benefit.

He made a very persuasive argument that elements of games (such as play, practise and mastery) are in fact key to human survival and that SGs will play a huge role in ensuring that education is fit for purpose if we as a community are successful in overcoming misconceptions and age-old prejudices in those who should be utilising it as a mode of learning.

He argued that it is our natural inclination to 'routine-ise' tasks and information (to understand, recognise and control them) thus making them predictable (a.k.a. boring) and it is therefore the role of games to react against this human tendency to deliver an exciting experience in a safe environment.

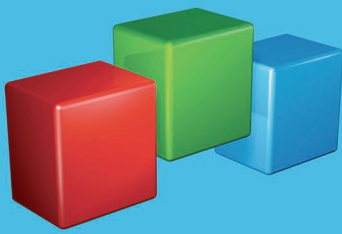
If the statements that "games are convenient distillations of cognitive schemata" and "games are experimental methods of solving complex problems such as global warming and poverty" spark any questions in you then I thoroughly recommend his book: "A Theory of Fun".

Key takeaway = games are a powerful and natural way of learning

Making Game based Learning & Training Pervasive in the Armed Forces and Elsewhere – Michael Macedonia.

Talked generally about how the US Marine Core has made use of game technologies (e.g. Full Spectrum Warrior) and why.

He described games as more than mere eye candy for younger generations and that they were, instead, "Neuro aesthetics".



Their use of SGs driven by: increasingly complex missions and organisational structures, new methods of warfare (e.g. cyber war), robotics, proliferation of COTS equipment, 'up-tempo' (busy) soldiers, complex weapon systems, lack of spectrum and space, urban combat, rapid technological and social change.

He also talked about the '3 block war' where soldiers have to carry out humanitarian, peace keeping and mid-intensity operations in a very confined space all in the same day.

An interesting use of SGs was to prepare soldiers prior to shipping out overseas. They could experience environments before getting into them and share experiences with those that had been there already. This could include operational combat tactics or cultural sensitivity training.

They are very interested in using mobile technologies – the rationale being that 30m consoles are sold each year vs 500m cell phones and therefore, people are more familiar with the medium.

He argued that SGs instil judgement skills and teach people to think and that they can prove that in real accounts of 'lives saved'.

Key takeaway = games can make new recruits 'virtual veterans'

How Games Benefit the Public at Large – round table chaired by Benjamin Stokes (MIT)

A reasonably useful session that involved the entire audience in thinking about what large-scale social issues could be tackled with SGs approaches.

I came away with several product ideas that I'm not sharing – sorry!

Ensuring Game Training & Cost-effectiveness Through Pervasive Assessment – Michael Stiso (Chi Systems Inc)

Assessment was identified as probably the most important issue in SGs right now (Ben Sawyer) and Michael attempted to outline a methodology for ensuring that assessment is built into SGs from the outset rather than as an after thought.

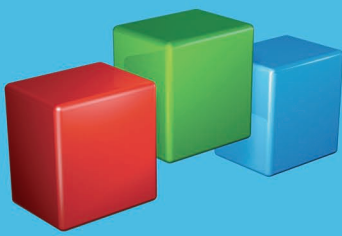
He identified the 3 key assessment stages as:

Domain analysis – assessing the subject and setting prior to designing the game to ensure that it is fit for purpose;

In game – where real time assessment is used to change game elements, the challenge and RT feedback;

Back end – where useful and appropriate metrics are extracted to identify user performance and game performance (to identify possible improvements).

Key takeaway – tacking a MCQ onto an otherwise entertainment-orientated game will not suffice, assessment is the most important element of a Serious Game.



Developing Standards for Reporting and Data Acquisition in Serious Games – open discussion chaired by Benjamin Pecheux.

This session involved around 75 people who were all facing problems in dealing with the data that games need to store and in making use of it in disparate IT infrastructures.

Although not the most interesting of subjects, this session none-the-less highlighted the fact that if you are going to build SGs then you need to be very sure about the environment in which it will be used and what stakeholders need what data, for what purposes and in what format.

The eLearning metadata standards (SCORM) were criticised heavily as being totally unusable for SGs.

Conventional game logs were likewise recognised as of having limited value in a education or training environment.

Key requirements from the floor were the need for a traceable log of players' decisions in game, key metrics from the game that need to be converted into useful reports, save game states (for users to carry on from where they left off) and scoring.

It was recognised that the game needs to save data for game play requirements but that this was unlikely to be useful for training measurement, assessment and monitoring purposes.

Key takeaway = every game is different and SGs will be used in a wide variety of complex settings.....it is uncertain whether a set of standards actually be defined?

Case Study: VSTEP Emergency Simulations – pjotr van Schothorst

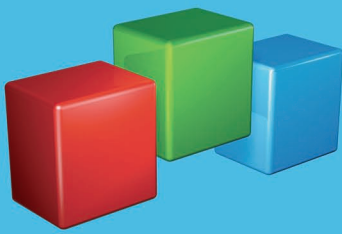
Real-life experience is the best way to learn. Unfortunately, this is often too expensive, too dangerous or simply not possible.

VSTEP creates virtual experiences that allow people to live through real-life situations without the associated dangers or costs.

Key points:

- Factor in long lead times (i.e. up to 1.5 years!)
- Start small and grow big
- Be "nice and humble" (game developers are sometimes seen as unclient focussed!)
- Fixed price is often more important than fixed time
- Use domain expertise throughout (subject knowledge, voice audio etc)
- Spend of LOT of time on design specs
- Find and agree recurring revenue streams
- Discuss roll out options
- Plan for between 20% and 40% extra development time
- Use WYSIWYG/middleware as often as you can

Sessions held on Tuesday 8th March



Online Worlds and Serious Gaming – Edward Castronova

Ed talked about his research into the economic basis of MMORPGs and similar game genres.

He described MMORPGs as 'sandboxes for testing economic and political theories'.

The graphical setting may be fantastical but the relationships between players are very real.

Virtual currencies are 'near liquid' given that you can sell, for example, World of Warcraft gold pieces on eBay for US\$40*

* WoW recently started cancelling user accounts if this practise was carried out.

Global ingame trading estimated at between US\$2bn and 17.7bn

60% of US population have played games in last 6 months, 145m people of whom 43% are female.

20% of WoW players described themselves as 'residents' of the game – they enter the real world to fulfil physical needs.

GDP/capita (WoW) – US\$2,000 p.a. – greater than that of Bulgaria.

Previous Serious Games Summit reports (3rd Parties)

Washington (Autumn 2004)

<http://www.cordelia.uk.com/seriousgames.html>