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Gaming Approaches in Learning and Teachers' Roles

YEO Gee Kin

(yeogk@comp.nus.edu.sg)

Associate Professor, Information Systems, SoC, 
President, SSAGSg 

YeoGK and SG

- MAGNUS (magnus.comp.nus.edu.sg)
- First ISAGA conference in 1991
- Language learning games
- Math games
- SGX (www.ssagsg.org/sgx)
- Founded Decisionware in 2003 (www.decisionwaresim.com)
- Founded SSAGSg in March 2006 (www.ssagsg.org)

Seeing is believing
Doing is learning

Gaming Approaches in Learning

- A gaming approach in learning
 - a play-oriented learning
 - No real 'play' in classroom setting
 - Power relationship
 - No choice
- *Serious Gaming*
 - Not just players
 - Not just technology
 - “**Somebody out there with a 'serious (not-for-profit) motive'**”

Gaming Approaches in Learning

- A play-oriented activity in the learning process
 - Providing motivation (*challenging, engaging*)
 - Providing practice
 - Making it interesting, less formal, unusual, memorable...

“To play the game well you need to be able to imagine what is going to happen before it happens. When you make a mistake it helps you to plan what to do better next time.”

A P4 pupil

Gaming Approaches in Learning

- Gaming objective vs learning objective
 - Leadership training with MMORPG
 - Combinatoric math concepts in Mahjong
 - *Mission maker*



- Involve learners in the creation, or game setup

Tehnology Support

- Technology support vs human facilitation
- Technology support AND human facilitation
- Technology support
- Content (structure, metadata) in database
- Game generation from templates/frames
- Task support
- Student model
- Community network
- ...

Gaming Approaches in Learning

Areas of concern

- Content
- Technology Focus areas in ISAGA2009
- Methodology
 - Abstraction of / theory on elements of *content* and *technology* and their integration

Teachers' Roles

Teachers deal with serious issues

- Game idea, design
- Selecting simulations and games for different learning goals Evaluation SGX
- Creating the context
- Managing the learning process
- Facilitation skills and knowledge
- Assessment In-process assessment Technology support

On Game Design

- Game design has traditionally been limited to mainly instrumental and artifact design. With the growing awareness of potentials of gaming, there is growing interest in the areas such as gaming to enhance change, to improve the capacities of participants to support change, and to their impact on the culture of the participants, especially the young ones. Distinction is made between what is called the 'design in the small' and 'design in the large', analogous to the distinction between 'programming in the small' and 'programming in the large' in software engineering.

J Klabbers, an IAC member on ISAGA2009

On Assessment

- Simulation games provide participants with valuable experience in realistic settings. However, such experience does not guarantee that participants will learn from it. This is because people learn from experience only when they reflect on it, gain valuable insights, and share these insights with each other

On debriefing

- Debriefing is the process of facilitating participants to help them reflect on their experience, gain valuable insights, and share them with each other. In debriefing, participants recall the simulations, analyse the elements, derive cause-effect relationships and evaluate the alternative course of action.



www.isaga2009.org



- **Pre-conference Workshops for Educators**
- **Important dates**

01 March 2009	Proposals
01 April 2009	Notification
25 April 2009	Early bird registration ends
01 June 2009	Final submission
22 June – 26 June	Pre-conference workshops
29 June – 03 July	Conference