Games to Learn

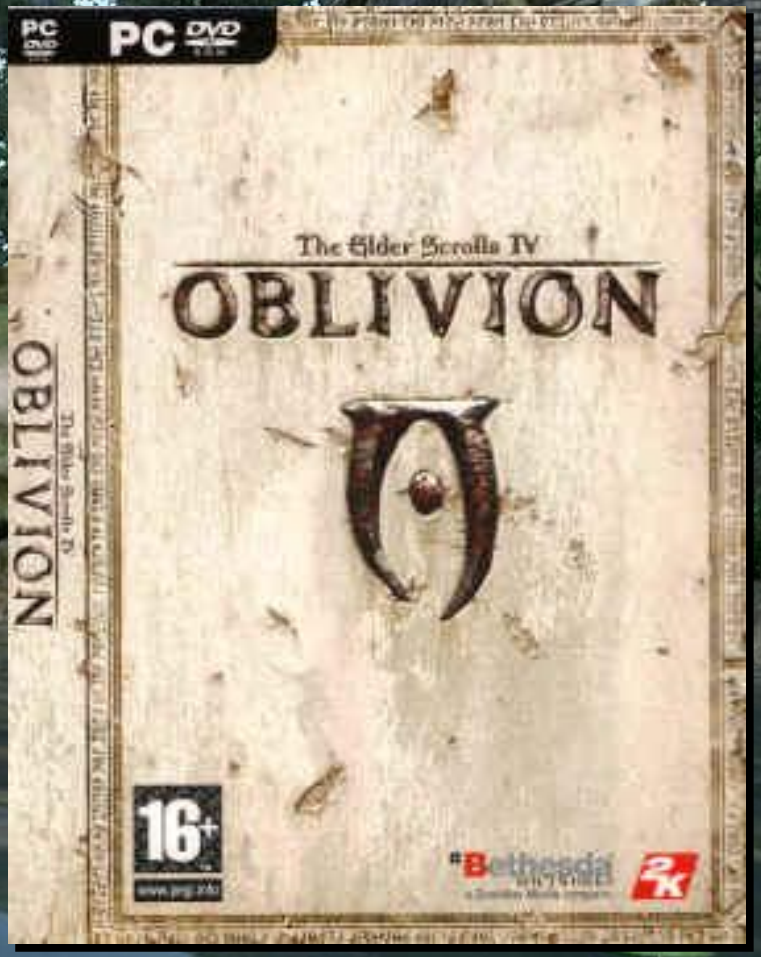
Dr. Tony Manninen
LudoCraft Ltd.

Information vs. Interaction

- The lack of action is evident in many of the current learning systems
  - Information needs to be interactive
  - Not just knowledge because of the knowledge

- What is knowledge used for?
  - Support for decision-making
  - Solution for the problem
  - Holistic analysis and delineation
  - Shared perspectives
  - To gain deeper knowledge

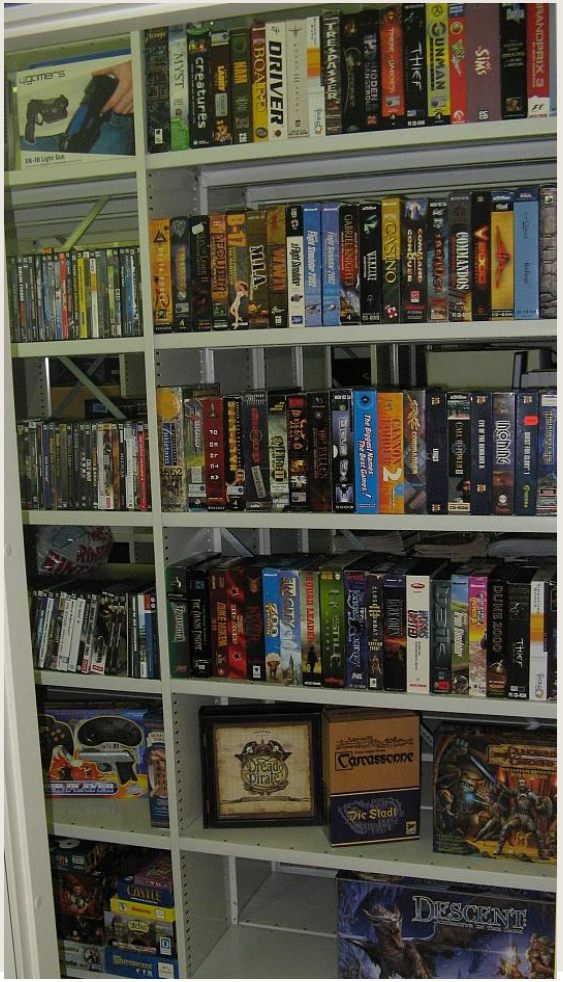
"Every game is a learning game"



© 2006 Bethesda Softworks LLC, a

Learning Material?

Games, games, games...



Is playing a way to learn ...

... and does that learning transfer to practice?

Rock Band → playing
Flight Simulator → aviation
Zoo Tycoon → biology skills
SimCity → environment planning
Stronghold → medieval administration

World of Warcraft → tolerance

Name of the Game

”Game is a series of meaningful choices” (Sid Meier)

- The meaning of decision-making
  - What is a meaningful choice?
  - When are learners making meaningful choices?

- ***”Hard fun”*** – the playful challenge needs to be
  - engaging
  - problem-based
  - objective-oriented
  - interactive
  - big enough
  - meaningful

Not the same as EASY!

Game Worlds

Context, objective, challenge and measures

From Physical to Virtual

From Spectator to Participant

Active vs. Passive Behaviour

Risks and Uncertainty

- Do games teach us to tolerate uncertainty?
- Are gamers more in control with risks?

In *games* it is OK to fail ...

Game Over

... and it is even expected!

Creativity, Imagination and ...

LudoCraft

... Rich Experiences

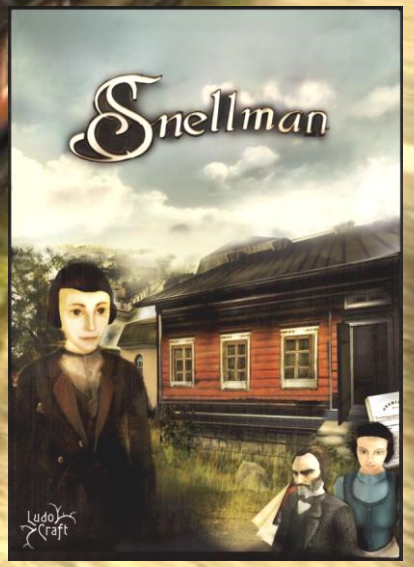
Cases

- ***Snellman*** **Learning Game**
- ***NoviCraft*** **Team Training Game**
- ***realXtend*** **Virtual Environment**

Snellman Learning Game

Action, Exploration and Problem-solving

Game as a motivator
Computer as a tool
3D-visualisation as a context



http://ludocraft.oulu.fi/snellman/

Team Training Game: NoviCraft

From Playing to Collaborative Work

Platform for learning games?

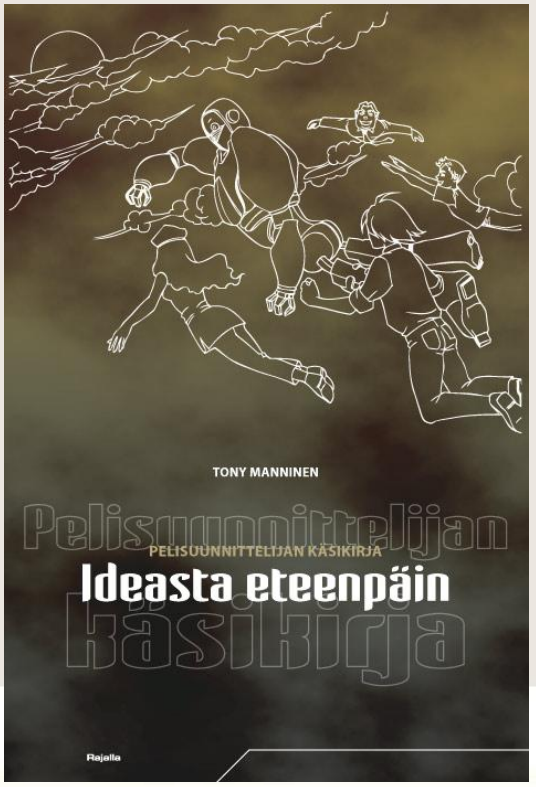
www.realxtend.org

”Have Fun and Explore”

Game = Life

Game is a way to **see** and **do** things:

- **Motivator**
- **Tool / medium**
- **Point-of-view**
- **Action**
- **Context**
- **Participatory**
- **Illustratory**
- **Platform for learning acts**



Want to Play?

LudoCraft Ltd.

Teknologiantie 13

90570 OULU

www.ludocraft.com

Tony Manninen

+358 40 715 7495

tony.manninen@ludocraft.com