

6.1 What added value can serious gaming offer in a Holodeck setting?

Distinction between:

- A dynamic Holodeck, subject to change: the “reality” is constantly evaluated and then adapted. Used for purposes such as design.
- A static Holodeck: lets participants experience a certain static “reality”. Used for purposes such as training.

Serious games usually focus on latter part, in which case they are meant to teach something, but serious gaming may also play a role in design processes during the “evaluation” step or open-ended simulations may be used to make changes and examine the results. In this case, the virtual simulation may not contain all six game elements that were identified in section 2.2.1. Discussion will be based on the six game elements identified in section 2.2.1, which were: For each of them, the way in which it may be used in a Holodeck will be discussed, making a distinction between a Holodeck that is used in a static and a dynamic way.

<advantages split out in static and dynamic?>

<distinction between advantages provided by game elements and game technology?>

6.2 What added value can a Holodeck offer to serious gaming?

Two ways of using a Holodeck for the support of serious gaming:

- providing tools that offer virtual game world
- environment itself becomes game world

Both uses have their own implications, but particularly the second form may provide a large number of changes and advantages.

Possibilities for interaction within a serious game are preprogrammed/predetermined, even in open-ended simulations, and simulations are always abstracted in a number of ways, which means important aspects that seemed irrelevant during game design might have been left out. In a Holodeck, participants might interact in a way that was not foreseen and may run into problems that wouldn't have existed in an abstracted virtual simulation. <example>

This openness makes a Holodeck-simulated better equipped for requirements engineering and design processes than regular serious games. This open nature and the fact that both players and their physical environment may become part of the game world can have an

important effect on a number of the game elements that have been discussed in section 2.2.1:

- Situatedness and story
- Interaction
- Rules and an underlying model

A Holodeck may also provide a number of changes and advantages when it is used as a way of offering a virtual simulation, rather than being part of the simulation.

- supporting introductions and feedback sessions at the same time
- group experience
- presence of expert/facilitators

(all support reflective learning)

- there may be a “game master” present in the Holodeck during a Holodeck session who can change the storyline, events that occur, etc. as he/she sees fit, based on the behaviour of the players so far. <reference to similarities with the role of a Dungeon Master in role playing games> <example of e-semble>

<Advantages>