Avatars in Class: Campus Hamburg in 3D.

VWBPE 2011 | Virtual Worlds Best Practices in Education

Second Life „North 1“ | HAW Hamburg | March 18, 2011 |
Welcome to Campus Hamburg in 3D.

The Campus was created in 2007 by BÜRO X Media Lab with the support of the City of Hamburg (Hamburg@work, GameCity) and the Hamburg Chamber of Commerce.
Going live on November 27, 2007.

The 3D Campus opened its virtual doors after 6 months’ planning with international lectures held by Andreas Hebbel-Seeger and Jörg Förster for University of Hamburg.
Local projects, international network.

Since 2007, Campus Hamburg has evolved into a platform for research and development focused on avatar based education in virtual 3D environments.

Hosting virtual meetings, events, and conferences.

Exploring game based learning scenarios.

Creating immersive experiences not possible in real life.
Panelists and contributors to our presentation today:

Sue Gregory, Grad. Dip. Ed. | SL: Jass Easterman
University of New England, Armidale, Australia

Micha Becker, Dipl.-Ing. | SL: Sanders Beaumont
HafenCity University

Frank Boerger | SL: Boerger TUVNORD
TÜV NORD Group

Prof. Dr. Andreas Hebbel-Seeger | SL: ahs Planer
mhmk Macromedia University

Dr. Torsten Reiners | SL: Tyke McMillan
University of Hamburg | Institute of Information Systems

Prof. Dr. Wolfgang Swoboda | SL: Professor Svoboda
HAW Hamburg, Department of Media and Information

Hanno Tietgens | SL: Xon Emoto (Keynote + Moderator)
Campus Hamburg in 3D | CEO BÜRO X Media Lab
Inhabit all Worlds.

http://slurl.com/secondlife/University%20of%20Hamburg/120/123/25

Dr. Torsten Reiners
reiners@econ.uni-hamburg.de

Education and Research  Virtual Worlds 2008 - 2011
Inhabit all Worlds: Project overview.

**CONTAINER TERMINAL | QUEUE SIMULATIONS | SUPPLY CHAIN SIMULATION | VIRTUAL THEME RELATED LECTURES | PRODUCTION PROCESS SIMULATIONS | CONTEXTUAL LEARNING ENVIRONMENTS | IMMERSIVE EDUCATION TECHNOLOGIES | PLATFORM INTEROPERABILITY (e.g. OPEN WONDERLAND | 3D BODY CONTROLS (Wii) | AVATAR TRACKING | HARASSMENT SIMULATION | MOBILE COMPUTING | AUTOMATED ASSESSMENT LAB | CONTENT MANAGEMENT, INTER-EXCHANGEABILITY**

### Project Overview

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Realization by</th>
<th>Lit.</th>
<th>Short Description</th>
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</thead>
<tbody>
<tr>
<td>Container Terminal</td>
<td>T.Reiners, S.Wriedt</td>
<td>[2]</td>
<td>First project demonstrating the processes on a container terminal with focus on the watershed.</td>
</tr>
<tr>
<td>Queue Simulation</td>
<td>M.Dehling</td>
<td>[35]</td>
<td>Simulation of a pharmacy queue, where the user can vary various parameters like kind of queue, customer arrival number of pharmacists.</td>
</tr>
<tr>
<td>Supply Chain Simulation</td>
<td>S.Wriedt</td>
<td>[35]</td>
<td>Interactive teaching scenario for the build-oper-effect as the container terminal as supplier and the pharmacy customer.</td>
</tr>
<tr>
<td>SDDE-Lecture</td>
<td>T.Reiners</td>
<td>[6]</td>
<td>Lecture with international guest speakers and demonstration of production and logistics locations in Second Life. The course combined classroom and distance education as reality and virtuality was projected in both worlds.</td>
</tr>
<tr>
<td>Bottle Factory</td>
<td>A. Erlenköter, H.Mi, F.Sommer C.-M.Kühlendorf</td>
<td>[9]</td>
<td>Students project about production unit for a soda drink demonstrate processes in lectures and learn about requirements in designing production equipment.</td>
</tr>
<tr>
<td>Interactive Classroom</td>
<td>T.Reiners, C.Dreher N.Dreher H.Dreher S.Gregory, B.Pyman</td>
<td>[6]</td>
<td>The joint project with the Curtin University was about transferring software development into Second Life, where the students learn the whole software development cycle. The results are shown on the Australia 4 Learning Island.</td>
</tr>
<tr>
<td>Business Department</td>
<td>T.Reiners, S.Wriedt</td>
<td>-</td>
<td>Providing a space for institutes in the department.</td>
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<tr>
<td>vPUSh</td>
<td>A.Hobbel-Siegert C.Kühnelkampff</td>
<td>[8]</td>
<td>The virtual world part of the project was about creating a seminar room, whereas the real technological development consisted of a holodeck implementation, where scenes (e.g., arrangement of chairs/desks, objects) can be switched through a panel.</td>
</tr>
</tbody>
</table>

- **Graffiti (OpenWonderland)** S.Buttmann M.Naumann I.Visser [26] Interactive pin-board in Project WonderLand which is accessible and synchronized from other media devices (iPhone, websites, and worlds (Second Life)).
- **3D WII-Remote Input** S.Leder [26] Extending the Wii-Remote input by J.C. Lee [19] to the third dimension and transferring the input to multiple worlds at the same time.
- **Avatar Tracking/Reporting** Johannes Siap - Reports about movements, position, and actions of avatars on a web-site.
- **Interactive 3D Catalog** C.Kühnelkampff M.Wolter B.Altmann A.Wolter, R.Lindow - Designing and building an interactive catalog for 3D objects including a web-based repository. Later applications are, e.g., shopping support for stores like IKEA or a portable repository of all objects someone owns.
- **Harassment Simulator** J.Spetholtz, E.Borna [28] Role play in virtual reality as a role for virtual worlds. This project demonstrated how a simulator for harassment at the workplace could be realized.
- **Virtual Navigation** C.Min - Using the iPhone to navigate through building; i.e., projecting information about locations on the camera and/or virtual representation of the building.
- **Automated Assessment Lab** C.Dreher H.Dreher T.Reiners [27] For the interactive classroom and to demonstrate an automated essay grading software, we set up a lab including an advanced classroom, interactive posters, and a drop box for assignments.
Inhabit all Worlds: Examples.

SIMULATION of Logistics and Production

CONTAINER TERMINAL

PRODUCTION PROCESS

SUPPLY CHAINS

COLLABORATION, COMMUNICATION, SOCIALIZING

Team Meeting in 3D Space

HARRASSMENT SIMULATOR

Motivation Simulator in 3D

MEETINGS

DISTANCE EDUCATION
Inhabit all Worlds: Future Perspectives.

**Shopping in 3D: Mobile 3D CMS**
Christian Kuhlenkampff, Ronja Lindow, Andreas Wolter, Matthias Greifenberg, Björn Altmann

**Motivation**
- App to visualize, administrate, and buy/sell 3D objects
- Communication and storage on dedicated server
- Catalog functionality for (real) shops (e.g., Ikea)
- On-device storage of owned objects

The next big thing?
Augmented Reality Concepts
Mobile Computing | Shopping
The AVATAR as interface?
“Virtual Classrooms with Jass Easterman”
Sue Gregory, Lecturer ICT Education

School of Education, University of New England
Part of the Australis4Learning Initiative, associated with the University of Hamburg via Campus Hamburg in 3D in Second Life: http://slurl.com/secondlife/Australis%20Learning/134/136/22
University of New England, Armidale, Australia

“Virtual Classrooms with Jass Easterman”

2008-2011: Learning in a virtual world

Weekly sessions in-world
“Virtual Classrooms with Jass Easterman”
2008-2011: Learning in a virtual world

Engagement

Role-Play

More information http://www.virtualclassrooms.info/
HCU HafenCity University, Hamburg

HCU in 3d

Potential and Spatial Organization of Higher Education in the Synthetic World of Second Life” Diploma and research thesis (Apr 1, 2010 - Feb 6, 2011) to

– identify and occupy the topics for a university of the built environment and metropolitan development;

– develop a spatial organization for the institution

– develop strategical handling with new media technologies in research and education

– draft and establish immersion and applicability in the field of urban planning and architecture

Documentation http://www.hcuin3d.de
HCU HafenCity University, Hamburg

HCU in 3d - approach

CONCEPT DEVELOPMENT

SPATIAL ORGANIZATION
HCU HafenCity University, Hamburg

HCU in 3d - showcases

LECTURES  THEORY  LEARNING ENVIRONMENTS

BEYOND PARTICIPATION 3D  IBA HAMBURG 2013  COLLABORATIVE
TÜV NORD Group, Hamburg/Hannover

TÜV NORD IN 3D: Driving knowledge in a knowledge-driven enterprise.
TÜV NORD Group, Hamburg/Hannover

TÜV NORD Group, Hamburg/Hannover

Corporate trainings in 3D turn a profit, saving $3,126 (Ø) per participant in travel time and costs, and improving the carbon footprint.

Case study: [http://www.buerox.de/tuev-nord/index.html](http://www.buerox.de/tuev-nord/index.html)
Blended Learning in Virtual Worlds
Prof. Dr. Andreas Hebbel-Seeger / ahs Planer

Macromedia
University of Applied Sciences
Gertrudenstraße 3
D-20095 Hamburg

eMail: andreas.hebbel-seeger@mhmk.de
2007 University of Hamburg, institute of sport science: Crossworld and crossmedia lectures | 2007-2008 faculty of education: Exploration, extension and evaluation of learning scenarios with the use of a holodeck
2008-2009: Augsburg University, institute for media and education technology | Project based exploration of use cases and opportunities of VR
Since 2009: Macromedia University of Applied Sciences media and communication | Crossworld lectures, LMS-bonding (Sloodle), Visualization of ideas and processes relating to sport and events

http://slurl.com/secondlife/Campus%20Hamburg/68/204/23
DMI goes Second Life

Hochschule für Angewandte Wissenschaften Hamburg
Fakultät Design, Medien und Information, Department Information

Dipl.-Des. Christian Küttler
Prof. Dr. Wolfgang H. Swoboda, M.A.

Projektpartner:
Baltic Sea Virtual Campus Consortium (BSVC)

Platform: 3D Sim "Campus Finkenau" in Second Life

20 students each term, since SS 2008
DMI: Didactic approach and objectives

// Working with media, creating and organizing events
// Developing communication skills and media literacy
// In focus: Student life and politics of higher education
DMI: Projects

Campus Finkenau in Three-Dimensionality
// Faculty Design, Media & Information
Bachelor´s Programme Media & Information
// Information & Media Literacy
Communication Competence
// Future in Information Science & Management
DMI: Our hosts in real life, plus creators of the video live stream by ELBE-Studios.

http://www.elbe-studios.de
Perspectives.

So, where are we?
And where do we go from here?

Thank you: Trend One, Hamburg, 2009
Perspectives.

Technology is evolving in quantum leaps.

Leia & Obi Wan
Lucasfilm 1977

Chambers & de Beer
Cisco Systems 2007

Milo & Claire
Microsoft 2010
1,2 billion avatars have been registered so far, some of them quite mobile.

iPhone 2011 (Blue Mars Mobile), iPhone 2012 (?)
Perspectives.

Think OpenSim, think WebGL, think Unity – the social web is coming alive in 3D.
Avatars have come a long way. How far can they go in collaboration, creation and immersive education?

Please join the discussion of our panelists.
Thank you very much for engaging and participating.

Questions welcome:

Hanno Tietgens | Xon Emoto

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