

The Gameful University: The Use(fulness) Of Game Design Elements For Learning, Teaching and Researching

Spielräume | ITSI | University of Basel

17 January 2013

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www.geelab.rmit.edu.au



GAMES AND EXPERIMENTAL
ENTERTAINMENT LABORATORY





ABOUT THE GEELAB

At RMIT University's **GEElab**, we are researching how game design thinking and experimental entertainment can positively affect and alter architecture & urbanism, mobility, popular media, storytelling, engagement, other sciences as well as society itself.
















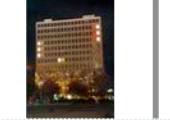

Research Example: Apply Gameful Design Methods and Technologies to Increase Enjoyability of the Connected Car

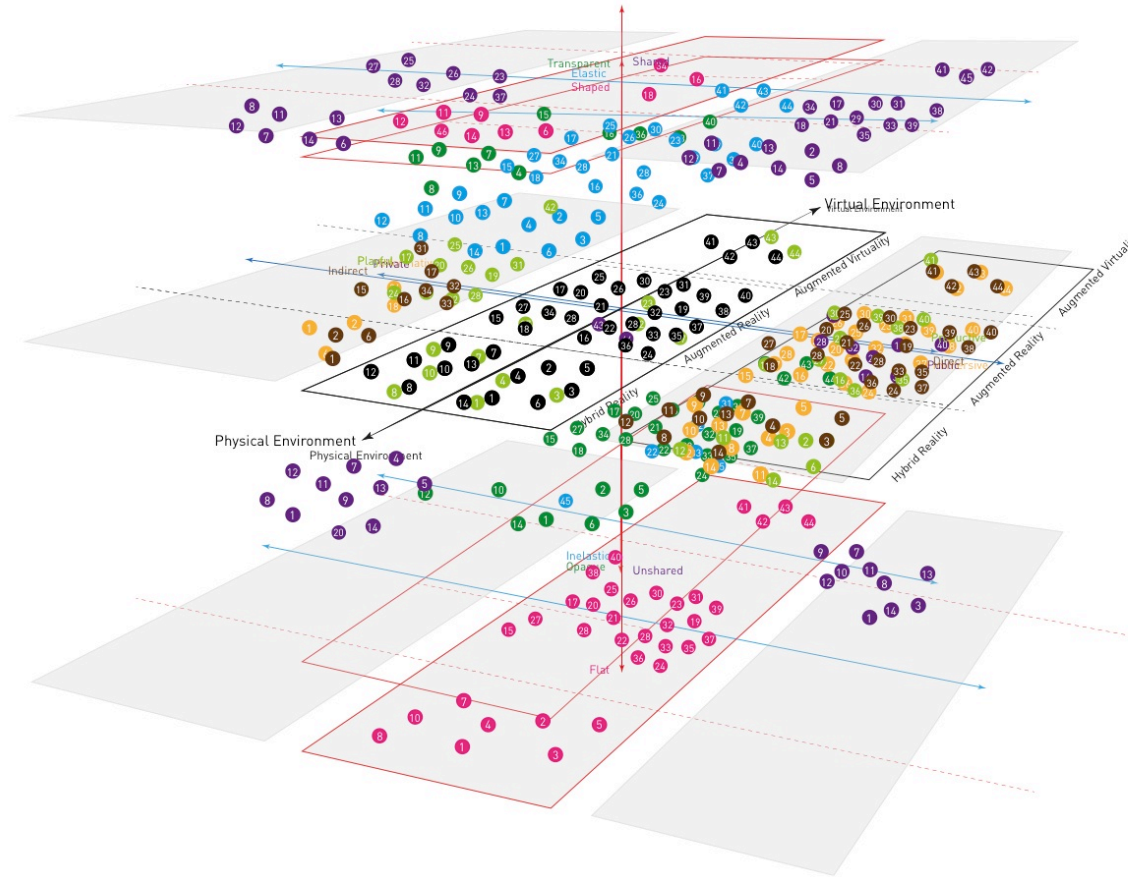
2011–2014



Displaying Futures: New Display Types & Integrations Bring Forth New Entertainment & Spatialized Applications (LG Display, Merck, Stylepark)



					
TOUCH	MOTION	SPEECH	COGNITION	VISUAL	TACTILE
					
AUDITORY	FLAT	SHAPED	TRANSPARENT	OPAQUE	INELASTIC
					
ELASTIC	MOVING	MOUNTED	LARGE	SMALL	SHAPE CONTINUITY STILLNESS VOLUME







3

70

Menu

Serious Game Example: Trouble Tower

Occupational Health & Safety Training Game (Dr Stefan Greuter & Student Team)

TROUBLE TOWER



Chief Investigator:
Dr Stefan Greuter

Partner Investigators:
Associate Professor Dr. Susanne Tepe
Dr Frank Boukamp
Associate Professor Dr. Fiona Peterson
Mr Christopher Barnes
Professor Dr. Ron Wakefield

Development Team:
Kim d'Amazing
Rhys van der Waerden
Kalonica Quigley
Thomas Harris
Tim Goschnick

Sound Designer:
Jeffrey Hannam

(For educational use only)

A GEElab Curation:
www.bizplay.org



BUSINESS PLAY 2012

Enterprise Gamification Symposium & Workshop

A Flagship Project for the Baden-Württemberg Creative Hub

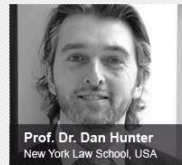
Karlsruhe, 27 September 2012 /// **APPLY NOW**

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If you believe gamification is a technology solution to a people problem,
you're screwed.

Sebastian Deterding, Hans-Bredow-Institut, DE

The Bizplay 2012 Experts



More information

www.codingconduct.cc
www.enterprise-gamification.com
www.gamifyforthewin.com
www.traviangames.de
www.geelab.mit.edu.au
www.audi.de



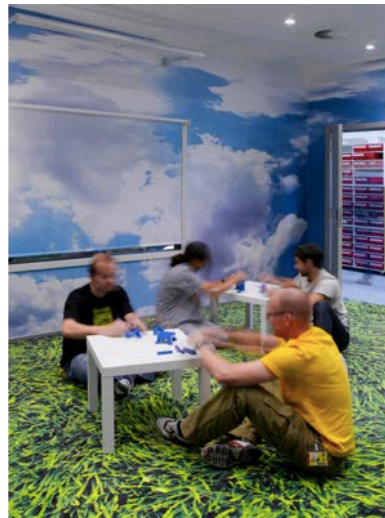
www.gamesforchange.org.au, 15-17 November 2012
hosted by RMIT's GEElab & School of MediaComm



G4C ANZ: Civic Engagement for Urban Change



- The City of Melbourne has key social and environmental challenges it had us address – **youth, recycling, wellness, community, liveability**
- Engaging the collective intelligence of the community using an event game



ABOUT GAMES, GAMEFULNESS & GAMIFICATION

**“Games are the
emergent cultural form of our time.”
(McKenzie Wark 2007)**

An Old Discourse!

Homo Ludens by Johan Huizinga
1938

HOMO LUDENS



PROEVE EENER BEPALING VAN
HET SPEL-ELEMENT DER
CULTUUR
DOOR
J·HUIZINGA

1938

1940

1942

1944

1946

1948

Mission: Turn The Browser Space Into a Gameful Experience

playbe's playce: <http://spw.playbe.com> (2006)



WHAT KIND OF PLAYER ARE YOU?

RESCUER



KILLER



EXPLORER



SCHUZER



WELCOME TO MY PLAYCE!

ABOUT

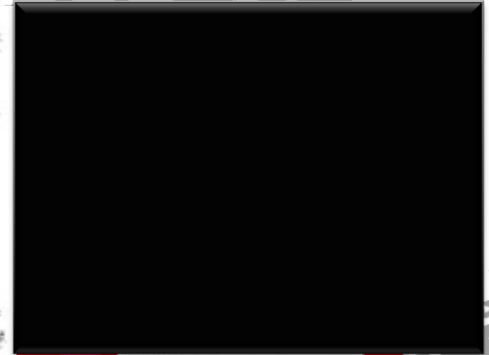
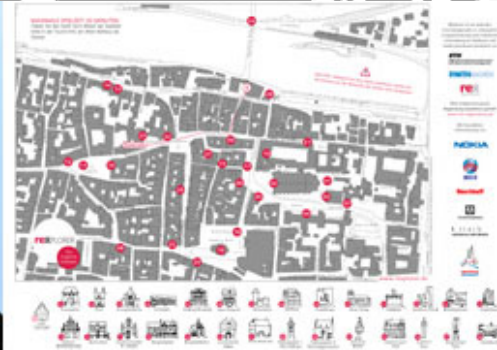
My name is Steffen P. Walz, and I am a game designer, a cultural anthropologist, and a digital media / architecture teacher and researcher. Currently, I am working at the ETH Zurich's chair for Computer Aided Architectural Design, pursuing my Ph.D., which I expect to complete in the summer of 2007. I also run the companies playbe and playbe records, the former for conceptualizing media experiences, the latter for experimenting with music distribution.

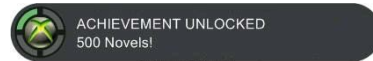
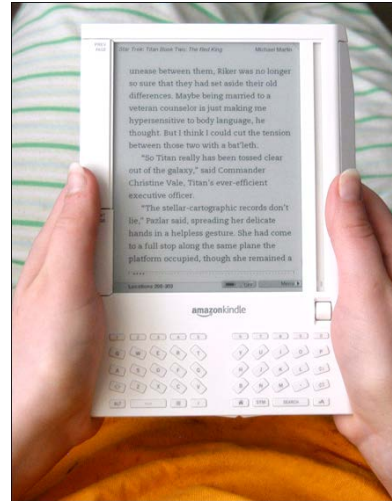
Here, in my playce, you can explore projects I have been involved in during the past years.

INSTRUCTIONS

Either - less exciting - you navigate my playce with the navigation bar below. Or, choose one of the four game modes on the left to access the design spaces I have created projects for. Each game's mechanic serves as my playce's menu selection - you navigate by playing. Once you have carried out a mechanic successfully, you will be taken to your selection. Mind that you can interrupt your game by moving the mouse from the left hand's side - where the game action takes place - into the center zone on the right hand's side (A-bar). Shift for ... and

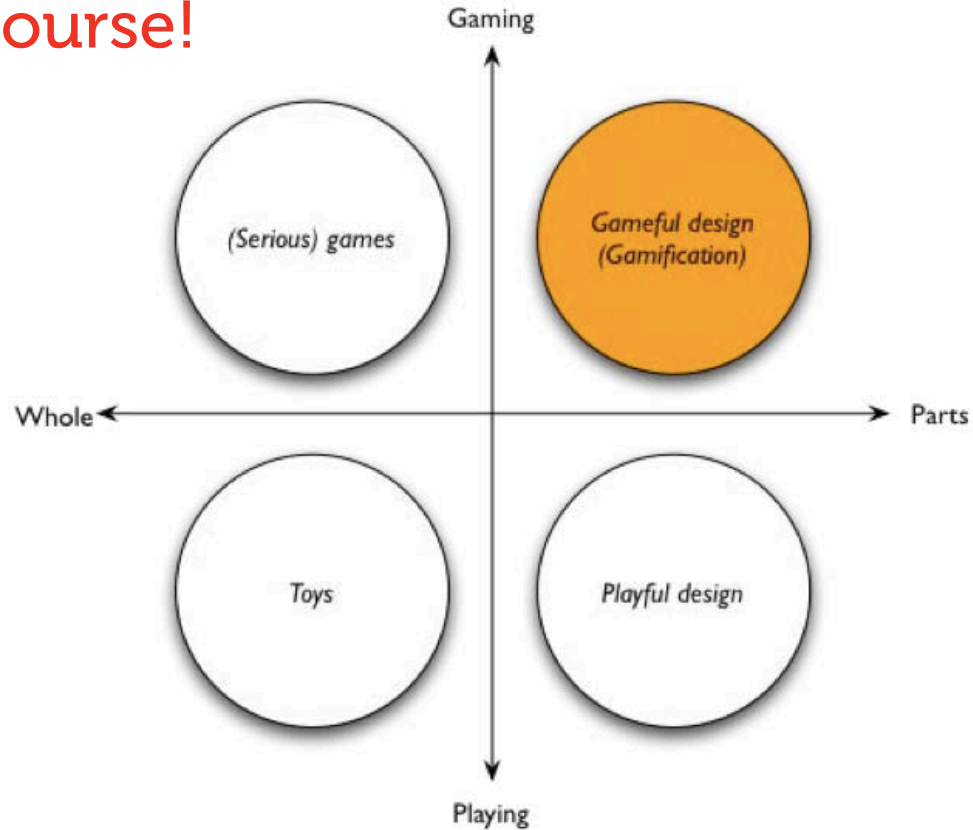
Mission: Make the Tourist Experience a Game
REXplorer, a location-based, gestural interaction service
for the city of Regensburg
ETH Zurich with partners RWTH Aachen etc. (2006–2008)





Jesse Schell's talk at DICE 2011:
<http://www.g4tv.com/videos/44277/dice-2010-design-outside-the-box-presentation>

A New Discourse!



“Gamification: (...) the use of game design elements in non-game concepts.” (Deterding et al. 2011)

Hype?













THE GAMEFUL UNIVERSITY

Game Design & The University



- The University As A Game: *Virtual U, Digital Mill*
- The Virtual University As A Knowledge Space: *Expositur*
- Campus Games: *Assassin at the MIT*
- Playing Learning: *ETH Game & WHAVSM*
- A Class as a Multi Player Game: *Lee Sheldon, Indiana University Bloomington*
- A Game Layer for Undergraduate Life: *RIT Just Press Play*
- Turning A Whole School Into a Gameful Experience: *Quest to Learn*
- Games for Scientific Research: *Fold.It, University of Washington*
- Gameful Learning Is Not A University Domain: *Coursera, Udacity, edX et al.*
- What can the classical university do?



Turning University Business Development Into a Serious Game:

Virtual U (Digital Mill 2001)



Expositor: Recreating A Knowledge Space using a 3D Game As a Tool
Fuchs-Eckermann (2002)



ETH Zurich
Department of Architecture
Chair of CAAD
DWF Design Studio WS 2004/05
www.caad.arch.ethz.ch



Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Project Description	Text	Project	Affiliation
	Martin Budzinski, Henrik Isermann	Martin Budzinski, Henrik Isermann	School for Architecture and Urban Planning, University of Stuttgart, DE, 2005

www.mrh.de/whavsm?

WHAVSM? A Pervasive Role-Playing Game

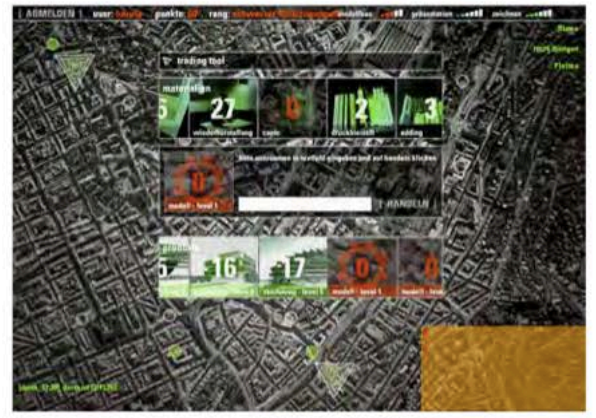
WHAVSM? was created for architectural students at the University of Stuttgart for use during their introduction weeks. It is meant to help them orientate themselves in their new city and university as well as to support networking amongst them. Further development of the game will integrate study scheduling abilities and a rating/evaluation system.

In our game, players have to collect barcode-like symbols with their cellphone cameras. These barcodes are spread out across the city of Stuttgart at stores and locations important to architecture students and their studies. When a barcode is scanned, the player's phone connects to the game server, and the location is "unlocked." As a reward for unlocking, players receive virtual resources such as glue or paperboard. By collecting locations and respective resources, players can fulfill the game's missions, which ask them to create deliverables consisting of diverse resources.

During the game, players must gain advanced skills; in order to do so, they must depend on each other for help. This sometimes causes conflict, but ultimately nurtures communication and cooperation. With the help of the game application, players can at all times check their stock of items, identify requirements for level-ups and deliverables, search locations on the Stuttgart map, trade their items and communicate with other players via a chat. To make this possible,

the game application is equipped with different modules. Through the location tool, the player gains access to unlocked places such as resource collection points, libraries and the mission center. The map tool provides geographic overview. The production tool is used to create items and to supply information about the number of items and resources available. With these, players can build models, present products or design drawings – if they meet the required skill level, that is. With the trading tool, items and resources can be exchanged, while the chat tool helps to breed accord amongst the players.

Thanks to Erwin Herzberger and Steffen P. Walz.
Mobile application by Michael Rohs, ETH Zurich.
Mobile sponsoring by Andreas Kahler, ChriaKeim.Com.





Lee Sheldon's Grading Procedure: You will begin on the first day of class as a Level One avatar. Level Twelve is the highest level you can achieve (Spring 2010)



Level	XP*	Letter Grade
Level Twelve	1860	A
Level Eleven	1800	A-
Level Ten	1740	B+
Level Nine	1660	B
Level Eight	1600	B-
Level Seven	1540	C+
Level Six	1460	C
Level Five	1400	C-
Level Four	1340	D+
Level Three	1260	D
Level Two	1200	D-
Level One	0	F

At this time Just Press Play is only open to IGM majors. ([Find out more?](#))

Create. Learn. Explore. Socialize.

JUST PRESS PLAY

Earn Achievements for things you do. Meet people. Attend events. Make something great.

How do you get your achievements?

- Get your PlayPass scanned.
- Submit content online.
- Get achievements by being in the game.



Each Achievement is worth 4 points spread across one or more of our categories



Just Press Play adds a game layer to our undergraduates' daily life. We invite students in RIT's School of Interactive Games and Media to engage in a playful way with their educational environments and experiences.

With the generous support of Microsoft Research Connections, we're working to make the platform available to other educational institutions.





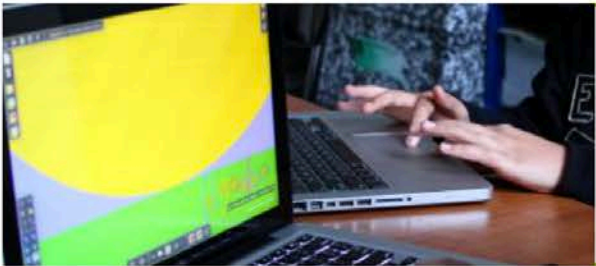
Fold.It
University of Washington (2009-)

You can stop this helix from moving. 
Middle click or Right click it to FREEZE.

Quest to Learn

Who is a Quest student?

- college focused
- hands on learner
- creative
- tech-savvy
- curious
- analytical
- loves new challenges



Sterling Mine Museum

8th grade students learn about geology at the Sterling Mine Museum.

Quick Links

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```
Gib deinen Namen in Anführungszeichen ein wie hier "Hans" und drücke dann die Eingabetaste.

> "Steffen"
=> "Steffen"


Gut gemacht! Wie lang ist dein Name? Finde es heraus indem du deinen Namen in Anführungszeichen setzt und .length anfügst. Danach drücke die Eingabetaste (von jetzt an machst du dies jeweils, nachdem du eine Lektion beendet hast).

In meinem Falle wäre dies "Hans".length.
```




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University of Edinburgh
Starts in 11 days (8 weeks long)



Fantasy and Science Fiction: The Human Mind, Our Modern W...

University of Michigan
Starts in 11 days (10 weeks long)



Writing in the Sciences

Stanford University
Ended 2 months ago (8 weeks long)



Microeconomics Principles

University of Illinois at Urbana-Champaign
Starts in 11 days (8 weeks long)



An Introduction to the U.S. Food System: Perspectives fro...

Johns Hopkins University
Starts in 6 days (6 weeks long)



Building an Information Risk Management Toolkit

University of Washington
Started 10 days ago (10 weeks long)

www.coursera.com



What Can The Classical University Do?



- Carefully evaluate digital strategy, and roll out.
- Recall strengths of physical space: students come for rites of passage, mating, celebrating knowledge, sports and companionship.
- Celebrate face-to-face discourse and innovation culture.
- Translate Uni currency (degrees, titles, certificates).
- Create curricula reflecting new generation of digital natives.
- Enable spaces to test new paradigms: learning by doing.
- Increase physical space attractiveness and informality, so students attend not just for learning.
- Start integrating gameful features where meaningful and fitting.
- Integrate physical and virtual experience.
- Market uni core values, vision, people, stories.
- What do you think?

Thank you!