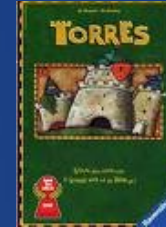
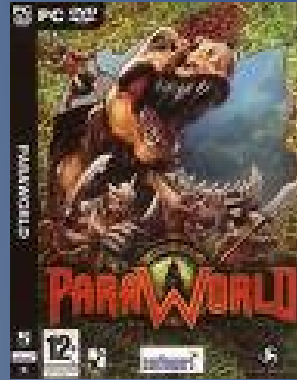
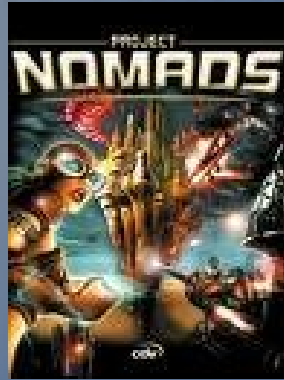


Potentiale der Serious Games Überblick & Strukturierung

SYLVIUS LACK

MEIN HINTERGRUND IN KÜRZE



und viele mehr...

- TU-Berlin, Filmhochschule Potsdam – Babelsberg (HFF)
- Computerspiel Entwickler seit 1995
- Fachbereichsleiter für Game Design an der Games Academy
- Aktuell Firmengründung im Bereich Serious Games (SYLA Productions UG)

„All games are about learning“

- Noah Falstein

„All games are about learning“

&

„All games are serious“

Serious Games ist kein
Genre...

sondern ein Anwendungsfall

Serious Games = Angewandte Computerspiele

- Dr. Malte Behrmann (General Secretary EGDF)

Angewandte Computerspiele
bedienen sich der Technologie
und Dramaturgie der digitalen
Spiele, um über die reine
Unterhaltung hinaus wirksam
zu werden

Technologie der digitalen Spiele

Technologie der digitalen Spiele

- Engines

Technologie der digitalen Spiele

- Engines

„Wenn jemand irgendwelchen halbwegs brauchbaren Code geschrieben hat, der xyz macht, nennt er das eine xyz-Engine.“

- David Salz
Fachbereichsleiter
Programmierung
Games Academy

Technologie der digitalen Spiele

- Engines

„Sprich: „Engine“ ist ein völlig inflationär
gebrauchter Begriff.“

- David Salz
Fachbereichsleiter
Programmierung
Games Academy

Technologie der digitalen Spiele

- Engines
 - Grafik

Technologie der digitalen Spiele

- Engines
 - Grafik
 - Audio

Technologie der digitalen Spiele

- Engines
 - Grafik
 - Audio
 - Physik

Technologie der digitalen Spiele

- Engines
 - Grafik
 - Audio
 - Physik
 - KI

Technologie der digitalen Spiele

- Engines
 - Grafik
 - Audio
 - Physik
 - KI
- Netzwerk / Kommunikation

Technologie der digitalen Spiele

- Engines
 - Grafik
 - Audio
 - Physik
 - KI
- Netzwerk / Kommunikation
- User Interface / Benutzerführung

Technologie der digitalen Spiele

- Engines
 - Grafik
 - Audio
 - Physik
 - KI
- Netzwerk / Kommunikation
- User Interface / Benutzerführung
- Eingabe- & Ausgabegeräte

Technologie der digitalen Spiele

- Engines
 - Grafik
 - Audio
 - Physik
 - KI
- Netzwerk / Kommunikation
- User Interface / Benutzerführung
- Eingabe- & Ausgabegeräte
- Plattformen (z.B. Playstation2: weltweit ca. 138 Mio. verkauft)

Dramaturgie der digitalen Spiele

Dramaturgie der digitalen Spiele

Drei Beispiele

Dramaturgie der digitalen Spiele

- Gameplay (eigene Definition)

Dramaturgie der digitalen Spiele

- Gameplay (eigene Definition)
- MDA Framework (Robin Hunicke, Marc LeBlanc, Robert Zubek)

Dramaturgie der digitalen Spiele

- Gameplay (eigene Definition)
- MDA Framework (Robin Hunicke, Marc LeBlanc, Robert Zubek)
- Stealth Learning (Noah Falstein)

Dramaturgie der digitalen Spiele

Game

Play

Dramaturgie der digitalen Spiele

Game

Play

- Partie

Dramaturgie der digitalen Spiele

Game

Play

- Partie
- Regelwerk

Dramaturgie der digitalen Spiele

Game

Play

- Partie
- Regelwerk
- Zeitlich &
räumlich
begrenzt

Dramaturgie der digitalen Spiele

Game

Play

- Partie
- Regelwerk
- Zeitlich & räumlich begrenzt
- Berechenbar

Dramaturgie der digitalen Spiele

Game

- Partie
- Regelwerk
- Zeitlich & räumlich begrenzt
- Berechenbar

Play

- Spielerisch

Dramaturgie der digitalen Spiele

Game

- Partie
- Regelwerk
- Zeitlich & räumlich begrenzt
- Berechenbar

Play

- Spielerisch
- Spielraum (tech.)

Dramaturgie der digitalen Spiele

Game

- Partie
- Regelwerk
- Zeitlich & räumlich begrenzt
- Berechenbar

Play

- Spielerisch
- Spielraum (tech.)
- When the cat's away, the mice will play

Dramaturgie der digitalen Spiele

Game

- Partie
- Regelwerk
- Zeitlich & räumlich begrenzt
- Berechenbar

Play

- Spielerisch
- Spielraum (tech.)
- When the cat's away, the mice will play
- Unberechenbar

Dramaturgie der digitalen Spiele

Gameplay

Die harmonische Abstimmung von vorgegebenen Regeln und individuellen Freiheiten erzeugt „Flow“

Dramaturgie der digitalen Spiele

Gameplay

Das Gameplay ist der Katalysator des Lernens und nicht der Lernstoff selbst

Dramaturgie der digitalen Spiele

MDA Framework (Robin Hunicke,
Marc LeBlanc, Robert Zubek)

Dramaturgie der digitalen Spiele

MDA Framework (Robin Hunicke,
Marc LeBlanc, Robert Zubek)

Rules → System → „Fun“

Dramaturgie der digitalen Spiele

MDA Framework (Robin Hunicke,
Marc LeBlanc, Robert Zubek)

Rules → System → „Fun“

Mechanics → Dynamics → Aesthetics

Dramaturgie der digitalen Spiele

MDA Framework (Robin Hunicke,
Marc LeBlanc, Robert Zubek)

Rules → System → „Fun“

Mechanics → Dynamics → Aesthetics

Designer →

Dramaturgie der digitalen Spiele

MDA Framework (Robin Hunicke,
Marc LeBlanc, Robert Zubek)

Rules → System → „Fun“

Mechanics → Dynamics → Aesthetics

Designer → ← Player

Dramaturgie der digitalen Spiele

Stealth Learning (N. Falstein)

Dramaturgie der digitalen Spiele

Stealth Learning (N. Falstein)

- Make learning optional

Dramaturgie der digitalen Spiele

Stealth Learning (N. Falstein)

- Make learning optional
- Fun vs. Drill

Dramaturgie der digitalen Spiele

Stealth Learning (N. Falstein)

- Make learning optional
- Fun vs. Drill
- The more you learn, the better you do

Dramaturgie der digitalen Spiele

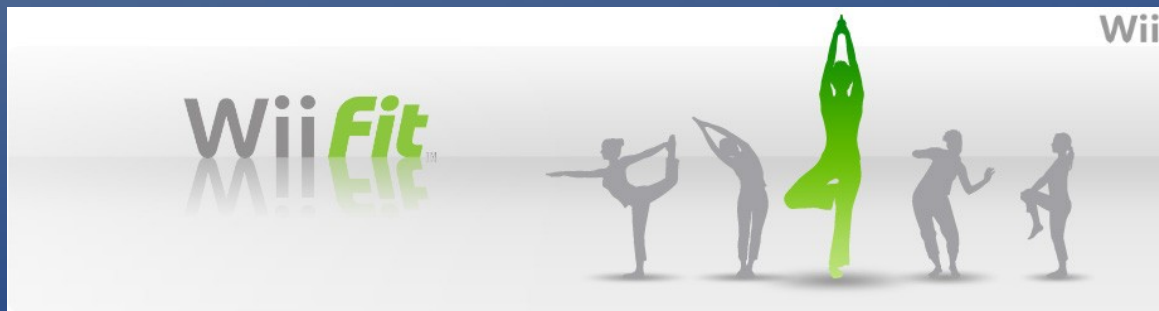
Stealth Learning (N. Falstein)

- Make learning optional
- Fun vs. Drill
- The more you learn, the better you do
- Possible to play without learning – but you get better with knowledge (Mind Share, Cisco)

Die folgenden Folien verwenden Elemente aus:

Taxonomy of Serious Games
by Ben Sawyer, Digital Mill &
Peter Smith, Univ. of Central
Florida, RETRO Labs
www.seriousgames.org

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health
Healthcare	Cybertherapy/ Exergaming

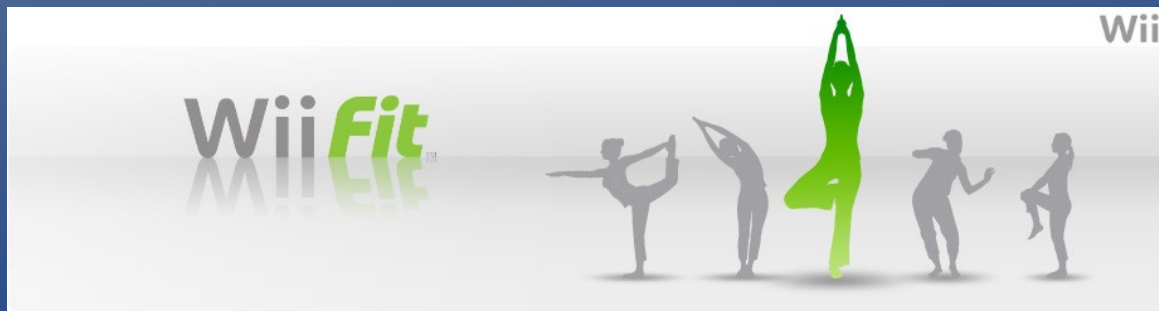


www.nintendo.de

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health
Healthcare	Cybertherapy/ Exergaming



www.konami.com



www.nintendo.de

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health
Healthcare	Cybertherapy/ Exergaming

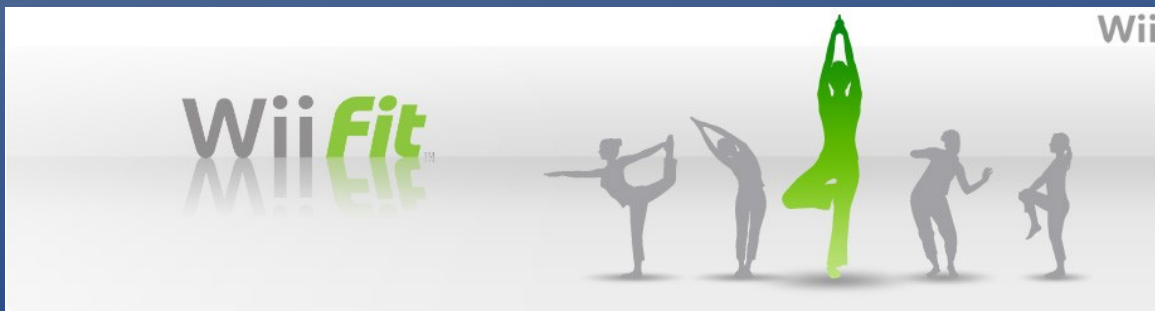
14th Annual International CyberTherapy and CyberPsychology Conference (CT14)

Call for Papers, Themen:

- Adaptive Displays
- Addictions
- Advanced user interfaces
- Ambient Intelligence
- Anxiety disorders
- Augmented reality
- Autism
- Avatars and autonomous agents
- Brain Computer Interfaces
- Cognitive assessment
- Cyberaddiction
- Cyberbullying
- Cybersickness
- Eating disorders, obesity and body image disturbances
- Education
- Haptics
- Internet
- Internet Addiction
- Mobile Computing
- Mobile Phones
- Motor Rehabilitation
- Multiplayer on-line games
- Neuropsychological assessment
- Pain reduction
- Physiological measurement and imaging during immersion in VR
- Posttraumatic Stress Disorder
- Presence
- Psychotherapy
- Rehabilitation
- Robotics
- Schizophrenia
- Science 2.0
- Serious Gaming
- Social Networking
- Telehealth and videoconferencing
- Training
- Videogame applications
- Virtual reality applications
- Web 2.0



www.konami.com



www.nintendo.de

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health
Healthcare	Cybertherapy/ Exergaming
Government & NGO	Public Health Education & Mass Casualty Response

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health
Healthcare	Cybertherapy/ Exergaming
Government & NGO	Public Health Education & Mass Casualty Response

Triage Trainer

www.trusim.com



Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health
Healthcare	Cybertherapy/ Exergaming
Government & NGO	Public Health Education & Mass Casualty Response
Education	Inform about disease/ risks

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health
Healthcare	Cybertherapy/ Exergaming
Government & NGO	Public Health Education & Mass Casualty Response
Education	Inform about disease/ risks



www.hopelab.org

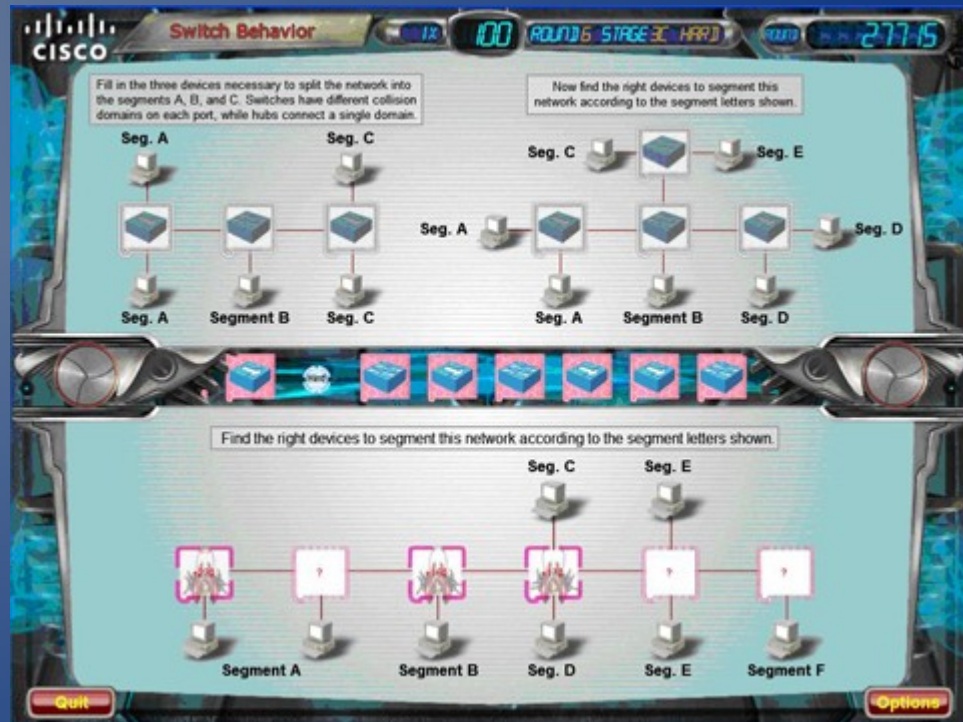


Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health	Games for Education
Healthcare	Cybertherapy/ Exergaming	Games for Patients
Government & NGO	Public Health Education & Mass Casualty Response	Inform Public
Education	Inform about disease/ risks	Learning

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health	Games for Education
Healthcare	Cybertherapy/ Exergaming	Games for Patients
Government & NGO	Public Health Education & Mass Casualty Response	Inform Public
Education	Inform about disease/ risks	Learning



Mind Share



<https://learningnetwork.cisco.com/community/connections/games>

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health	Games for Education	Games for Training
Healthcare	Cybertherapy/ Exergaming	Games for Patients	Training Games for Health Professionals
Government & NGO	Public Health Education & Mass Casualty Response	Inform Public	Employee Training
Education	Inform about disease/ risks	Learning	Train teachers/ Train workforce skills

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health	Games for Education	Games for Training
Healthcare	Cybertherapy/ Exergaming	Games for Patients	Training Games for Health Professionals
Government & NGO	Public Health Education & Mass Casualty Response	Inform Public	Employee Training
Education	Inform about disease/ risks	Learning	Train teachers/ Train workforce skills
Marketing & Communications	Advertising Treatment	Product Information	Product Use

Innerbetriebliche Fortbildung

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health	Games for Education	Games for Training
Healthcare	Cybertherapy/ Exergaming	Games for Patients	Training Games for Health Professionals
Government & NGO	Public Health Education & Mass Casualty Response	Inform Public	Employee Training
Education	Inform about disease/ risks	Learning	Train teachers/ Train workforce skills
Marketing & Communications	Advertising Treatment	Product Information	Product Use

Innerbetriebliche Fortbildung
- Weltweiter Markt ca. \$ 500 Mrd.

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health	Games for Education	Games for Training
Healthcare	Cybertherapy/ Exergaming	Games for Patients	Training Games for Health Professionals
Government & NGO	Public Health Education & Mass Casualty Response	Inform Public	Employee Training
Education	Inform about disease/ risks	Learning	Train teachers/ Train workforce skills
Marketing & Communications	Advertising Treatment	Product Information	Product Use

Innerbetriebliche Fortbildung

- Weltweiter Markt ca. \$ 500 Mrd.
- Davon 5% interaktiv entspräche dem gesamten Entertainment Games Markt

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health	Games for Education	Games for Training	Games for Science & Research
Healthcare	Cybertherapy/ Exergaming	Games for Patients	Training Games for Health Professionals	Visualization/ Epidemiology
Government & NGO	Public Health Education & Mass Casualty Response	Inform Public	Employee Training	Data Collection/ Planning
Education	Inform about disease/ risks	Learning	Train teachers/ Train workforce skills	Corporate Science & Recruitment
Marketing & Communications	Advertising Treatment	Product Information	Product Use	Opinion Research

Folding@Home

<http://folding.stanford.edu/>

Version für die Playstation 3 vorhanden

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health	Games for Education	Games for Training	Games for Science & Research	Production
Healthcare	Cybertherapy/ Exergaming	Games for Patients	Training Games for Health Professionals	Visualization/ Epidemiology	Biotech manufacturing & design
Government & NGO	Public Health Education & Mass Casualty Response	Inform Public	Employee Training	Data Collection/ Planning	Strategic & Policy Planning
Education	Inform about disease/ risks	Learning	Train teachers/ Train workforce skills	Corporate Science & Recruitment	Documentary?
Marketing & Communications	Advertising Treatment	Product Information	Product Use	Opinion Research	Machinima

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health	Games for Education	Games for Training	Games for Science & Research	Production	Advergaming
Healthcare	Cybertherapy/ Exergaming	Games for Patients	Training Games for Health Professionals	Visualization/ Epidemiology	Biotech manufacturing & design	Public Health Policy & Social Awareness Campaigns
Government & NGO	Public Health Education & Mass Casualty Response	Inform Public	Employee Training	Data Collection/ Planning	Strategic & Policy Planning	Political Games
Education	Inform about disease/ risks	Learning	Train teachers/ Train workforce skills	Corporate Science & Recruitment	Documentary?	Social issue games
Marketing & Communications	Advertising Treatment	Product Information	Product Use	Opinion Research	Machinima	Advertising, Marketing, Product Placement

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health	Games for Education	Games for Training	Games for Science & Research	Production	Avergames	Games as Work
Healthcare	Cybertherapy/ Exergaming	Games for Patients	Training Games for Health Professionals	Visualization/ Epidemiology	Biotech manufacturing & design	Public Health Policy & Social Awareness Campaigns	Public Health Response Planning & Logistics
Government & NGO	Public Health Education & Mass Casualty Response	Inform Public	Employee Training	Data Collection/ Planning	Strategic & Policy Planning	Political Games	Public Diplomacy, Opinion Research
Education	Inform about disease/ risks	Learning	Train teachers/ Train workforce skills	Corporate Science & Recruitment	Documentary?	Social issue games	Teaching Distance Learning
Marketing & Communications	Advertising Treatment	Product Information	Product Use	Opinion Research	Machinima	Advertising, Marketing, Product Placement	Opinion Research

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health	Games for Education	Games for Training	Games for Science & Research	Production	Advergaming	Games as Work
Healthcare	Cybertherapy/ Exergaming	Games for Patients	Training Games for Health Professionals	Visualization/ Epidemiology	Biotech manufacturing & design	Public Health Policy & Social Awareness Campaigns	Public Health Response Planning & Logistics
Government & NGO	Public Health Education & Mass Casualty Response	Inform Public	Employee Training	Data Collection/ Planning	Strategic & Policy Planning	Political Games	Public Diplomacy, Opinion Research
Education	Inform about disease/ risks	Learning	Train teachers/ Train workforce skills	Corporate Science & Recruitment	Documentary?	Social issue games	Teaching Distance Learning
Marketing & Communications	Advertising Treatment	Product Information	Product Use	Opinion Research	Machinima	Advertising, Marketing, Product Placement	Opinion Research
Corporate	Employee Health Information & Wellness	Continuing Education & Certification	Employee Training	Advertising/ Visualization	Strategic Planning	Customer Education & Awareness	Command & Control

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health	Games for Education	Games for Training	Games for Science & Research	Production	AdvergAMES	Games as Work
Healthcare	Cybertherapy/ Exergaming	Games for Patients	Training Games for Health Professionals	Visualization/ Epidemiology	Biotech manufacturing & design	Public Health Policy & Social Awareness Campaigns	Public Health Response Planning & Logistics
Government & NGO	Public Health Education & Mass Casualty Response	Inform Public	Employee Training	Data Collection/ Planning	Strategic & Policy Planning	Political Games	Public Diplomacy, Opinion Research
Education	Inform about disease/ risks	Learning	Train teachers/ Train workforce skills	Corporate Science & Recruitment	Documentary?	Social issue games	Teaching Distance Learning
Marketing & Communications	Advertising Treatment	Product Information	Product Use	Opinion Research	Machinima	Advertising, Marketing, Product Placement	Opinion Research
Corporate	Employee Health Information & Wellness	Continuing Education & Certification	Employee Training	Advertising/ Visualization	Strategic Planning	Customer Education & Awareness	Command & Control
Industry	Occupational Safety	Workforce Education	Employee Training	Process, Optimization, Simulation	Nano/Bio-Tech Design	Sales & Recruitment	Command & Control

Serious Games Taxonomy by Ben Sawyer & Peter Smith	Games for Health	Games for Education	Games for Training	Games for Science & Research	Production	Advergaming	Games as Work
Healthcare	Cybertherapy/ Exergaming	Games for Patients	Training Games for Health Professionals	Visualization/ Epidemiology	Biotech manufacturing & design	Public Health Policy & Social Awareness Campaigns	Public Health Response Planning & Logistics
Government & NGO	Public Health Education & Mass Casualty Response	Inform Public	Employee Training	Data Collection/ Planning	Strategic & Policy Planning	Political Games	Public Diplomacy, Opinion Research
Education	Inform about disease/ risks	Learning	Train teachers/ Train workforce skills	Corporate Science & Recruitment	Documentary?	Social issue games	Teaching Distance Learning
Marketing & Communications	Advertising Treatment	Product Information	Product Use	Opinion Research	Machinima	Advertising, Marketing, Product Placement	Opinion Research
Corporate	Employee Health Information & Wellness	Continuing Education & Certification	Employee Training	Advertising/ Visualization	Strategic Planning	Customer Education & Awareness	Command & Control
Industry	Occupational Safety	Workforce Education	Employee Training	Process, Optimization, Simulation	Nano/Bio-Tech Design	Sales & Recruitment	Command & Control
Defense	Rehab & Wellness	School House Education	Soldier Support Training	War Games & Planning	War planning & weapons research	Recruitment & Propaganda	Command & Control

Kontakt:
Sylvius Lack, sl@syla.biz

<u>Serious Games Taxonomy</u> by Ben Sawyer & Peter Smith	Games for Health	Games for Education	Games for Training	Games for Science & Research	Production	Advergaming	Games as Work
Healthcare	Cybertherapy/ Exergaming	Games for Patients	Training Games for Health Professionals	Visualization/ Epidemiology	Biotech manufacturing & design	Public Health Policy & Social Awareness Campaigns	Public Health Response Planning & Logistics
Government & NGO	Public Health Education & Mass Casualty Response	Inform Public	Employee Training	Data Collection/ Planning	Strategic & Policy Planning	Political Games	Public Diplomacy, Opinion Research
Education	Inform about disease/ risks	Learning	Train teachers/ Train workforce skills	Corporate Science & Recruitment	Documentary?	Social issue games	Teaching Distance Learning
Marketing & Communications	Advertising Treatment	Product Information	Product Use	Opinion Research	Machinima	Advertising, Marketing, Product Placement	Opinion Research
Corporate	Employee Health Information & Wellness	Continuing Education & Certification	Employee Training	Advertising/ Visualization	Strategic Planning	Customer Education & Awareness	Command & Control
Industry	Occupational Safety	Workforce Education	Employee Training	Process, Optimization, Simulation	Nano/Bio-Tech Design	Sales & Recruitment	Command & Control
Defense	Rehab & Wellness	School House Education	Soldier Support Training	War Games & Planning	War planning & weapons research	Recruitment & Propaganda	Command & Control