gaming MØTER **prosjektledelse**

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1

er gamingerfaring **relevant** for prosjektledelse?

2

NYHROX

3

4

How Fortnite became the most successful free-to-play game ever

Raking in over $1.2bn in just 10 months, Fortnite has taken the world by storm. But how did Epic Games create this global phenomenon?

By Elizabeth Matsangou | Wednesday, November 14th, 2018

Fortnite uses cartoon-like graphics and avoids realistic violence to attract a younger audience and broaden its appeal. As such, it has found great success in varied markets

FORTNITE ØKONOMISKE SUKSESS

- 25 millioner spillere på 5 dager
- 250 millioner spillere
- Tjener 18 millioner pr dag
- 22 milliarder spilt inn i 2018

5

6

Fortnite showed us the future (and the past) of live music

Ten million people tuned in to Marshmello's concert in Fortnite's Pleasant Park, and it shows that music's next act is virtual

7

8

2006
FUN Technologies holds a Worldwide Webgames Championship, hosting 71 players and a grand prize of $1 million.

9

2011
Twitch gives esports a platform to reach previously unthinkable heights.
Games like League of Legends (LoL) and Defense of the Ancients 2 (Dota 2) have received millions of views.
twitch

10

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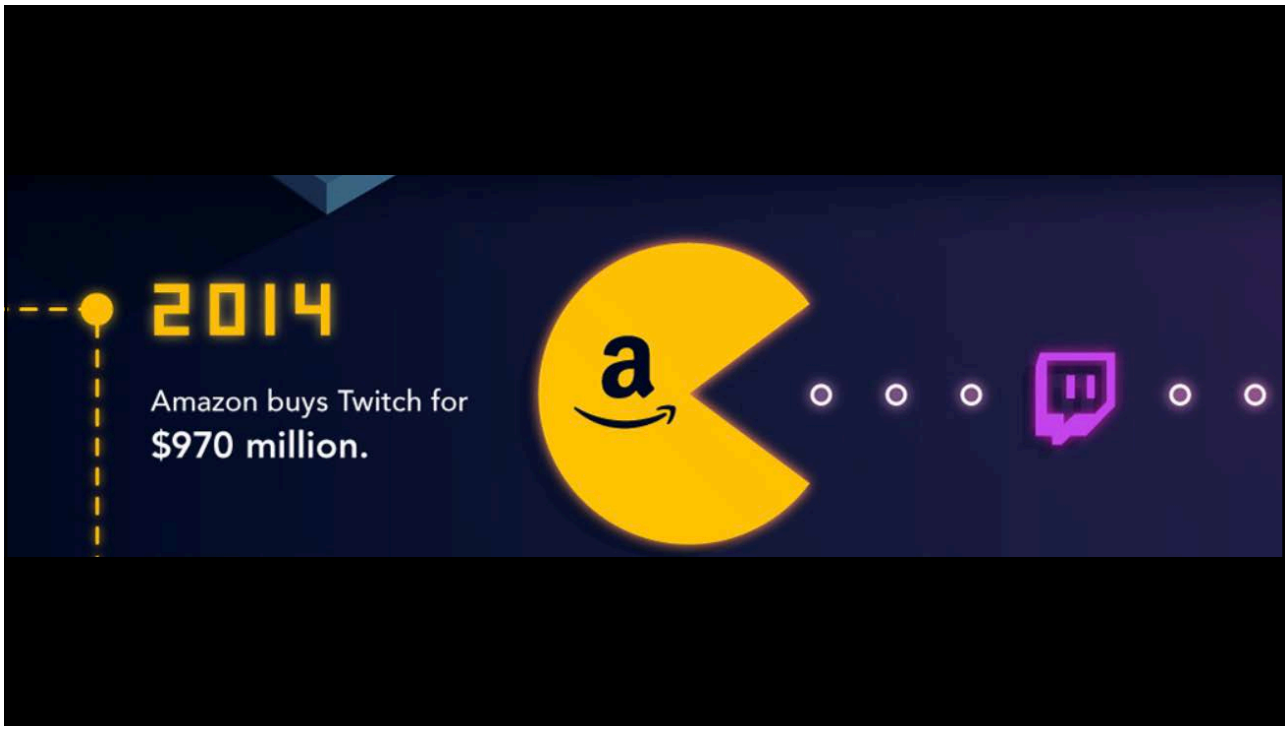

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2019
Google enters the market with the announcement of its new streaming service, Stadia.
The rise of streaming sites and multi-player games are bringing in rapidly growing audience and revenue.

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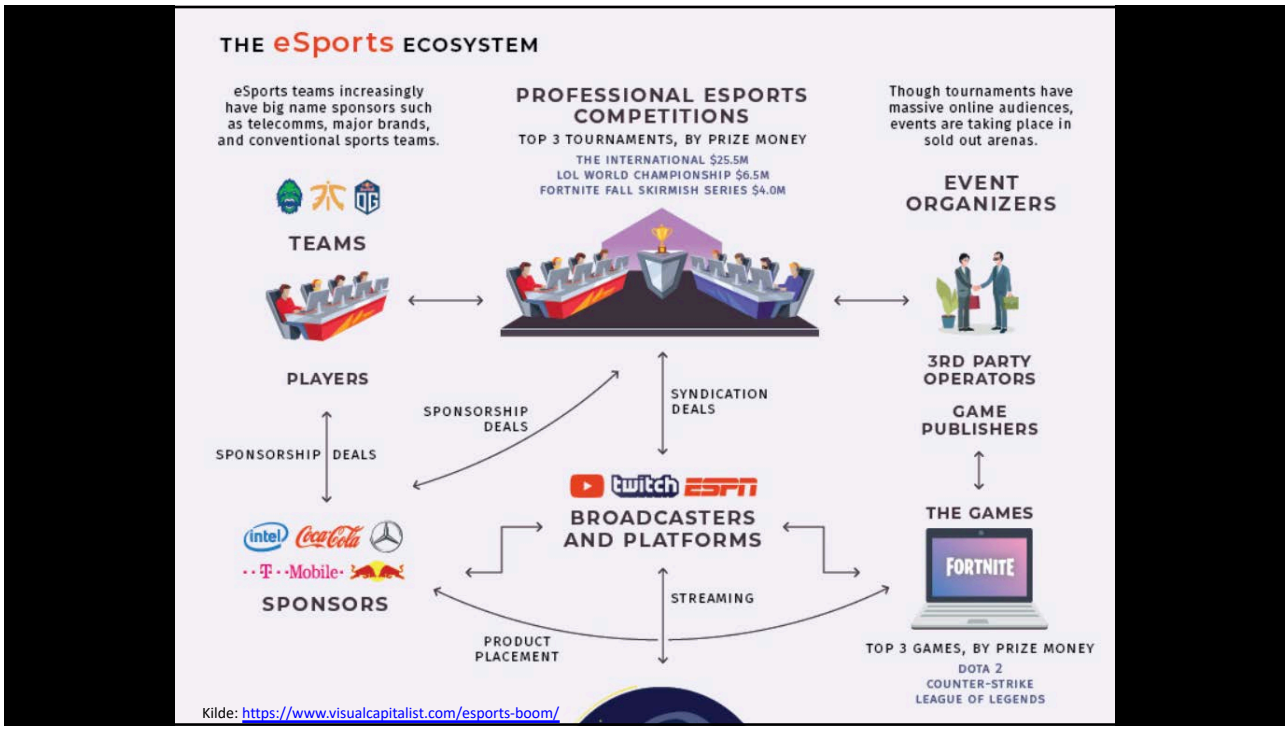
THE eSports ECOSYSTEM
eSports teams increasingly have big name sponsors such as telecomms, major brands, and conventional sports teams.
PROFESSIONAL ESPORTS COMPETITIONS
TOP 3 TOURNAMENTS, BY PRIZE MONEY
THE INTERNATIONAL $25.5M
LOL WORLD CHAMPIONSHIP $6.5M
FORTNITE FALL SKIRMISH SERIES $4.0M
Though tournaments have massive online audiences, events are taking place in sold out arenas.
TEAMS
EVENT ORGANIZERS
PLAYERS
3RD PARTY OPERATORS
GAME PUBLISHERS
SPONSORSHIP DEALS
SYNDICATION DEALS
SPONSORSHIP DEALS
BROADCASTERS AND PLATFORMS
THE GAMES
SPONSORS
STREAMING
PRODUCT PLACEMENT
TOP 3 GAMES, BY PRIZE MONEY
DOTA 2
COUNTER-STRIKE
LEAGUE OF LEGENDS
Kilde: https://www.visualcapitalist.com/esports-boom/

14

spill er
sosialt

15

Først da Mats var død, forsto foreldrene verdien av gamingen hans

Robert og Trude sørget over sønnens ensomme liv i rullestolen. Men da Mats døde, tente venner over hele Europa lys for ham.

16

Adresseavisen mener

Gamerne fortjener å slippe inn i varmen

Historien om Mats Steen, som NRK har fortalt de siste dagene, har grepet mange. Historien bør få oss til å se på dataspill med andre øyne.

Spiller sammen: I fjor høst inngikk den nye ungdomsklubben på Lade en leasingavtale på spillmaskiner. E-sportlokalene disponeres på dagtid av Dagskolen, og planen er å danne et eget e-sportlag.

Publisert: 30.01.2019 07:05
Sist oppdatert: 30.01.2019 07:05

17

Adresseavisen NYHETER SPORT KULTUR MENINGER UKEADRESSA MENY

– Det er viktig at ungdom har folk å være sammen med

Elevene på Lade har stablet på beina et fritidstilbud med kraftige spill-pcer og store fremtidsplaner. Det er venner, frihet, god stemning og tak over hodet som er viktigst, når godt over halvparten av alle elevene i nedslagsfeltet møter opp.

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19

kunstig
intelligens som
motspiller

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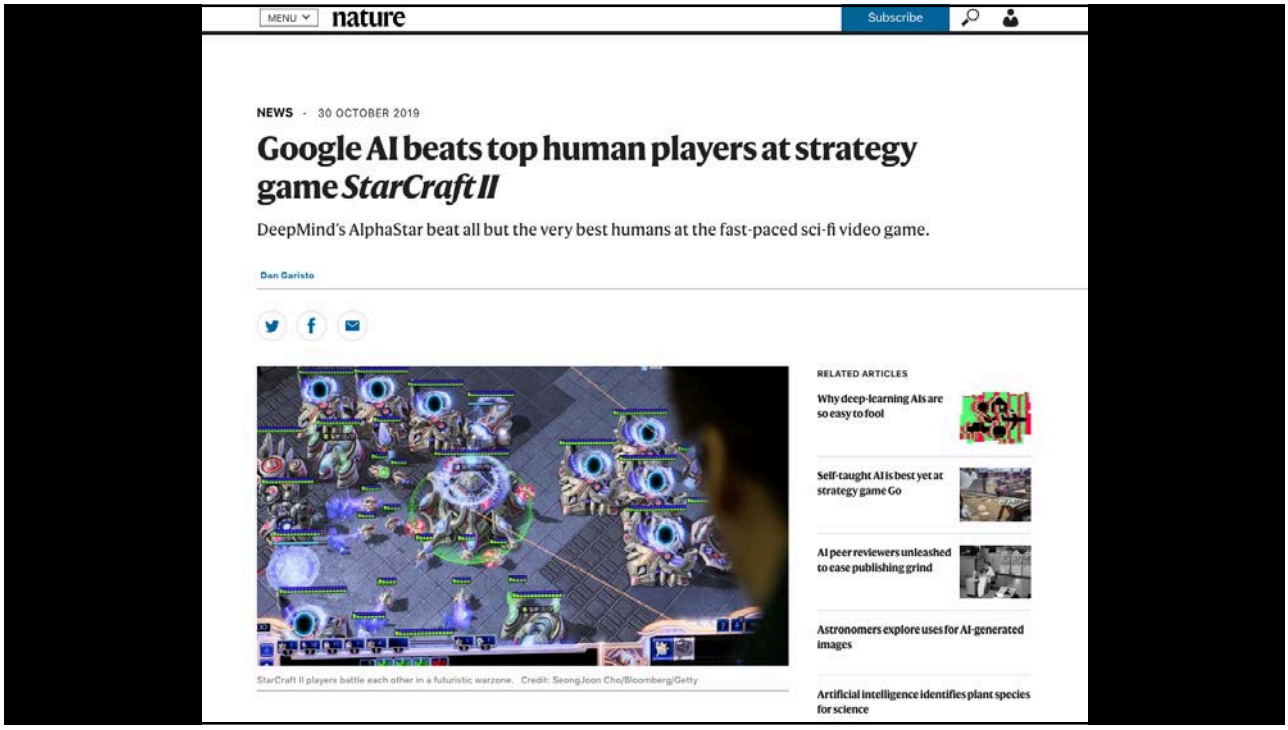
MENU
nature
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NEWS · 30 OCTOBER 2019
Google AI beats top human players at strategy game StarCraft II
DeepMind's AlphaStar beat all but the very best humans at the fast-paced sci-fi video game.
Dan Garisto
StarCraft II players battle each other in a futuristic warzone. Credit: Seong Joon Cho/Bloomberg/Getty
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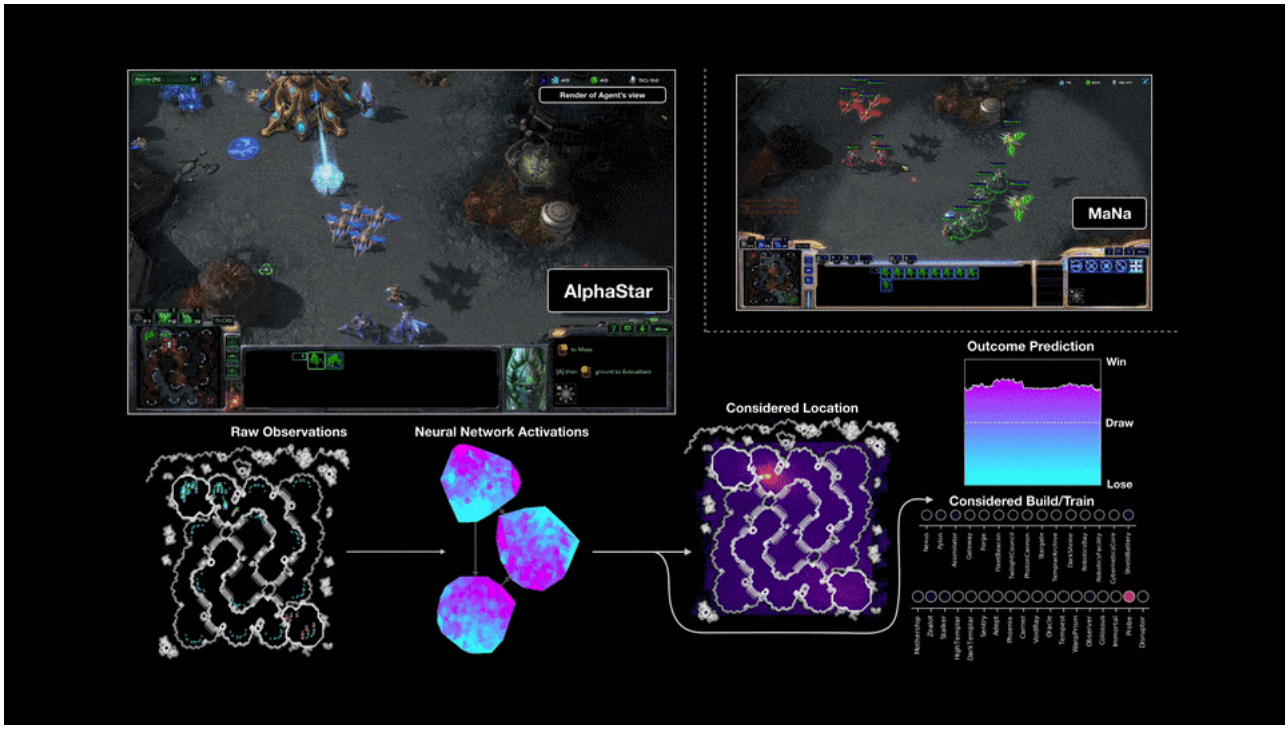
21

STARCRAFT II
LEGACY OF THE VOID
BLIZZARD ENTERTAINMENT

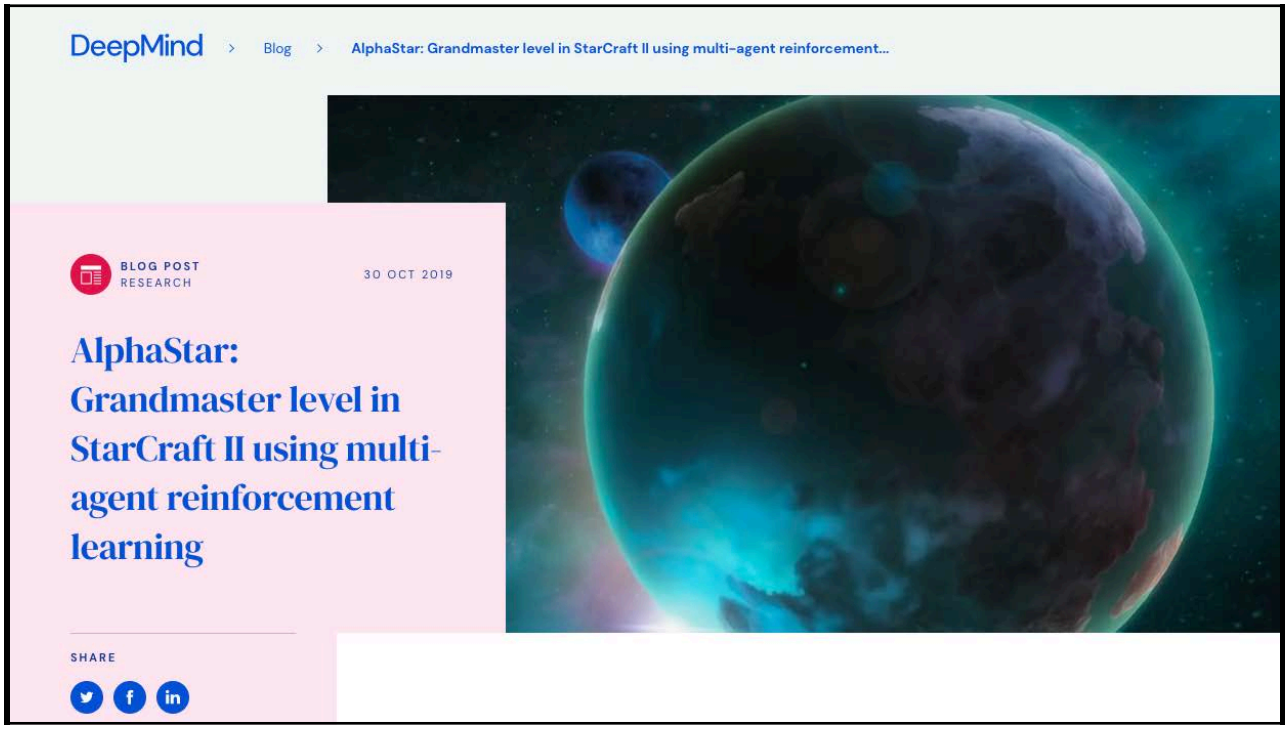
22


Render of Agent's view
AlphaStar
MaNa
Outcome Prediction
Win
Draw
Lose
Considered Location
Raw Observations
Neural Network Activations
Considered Build/Train

23

PRODUCTION
DeepMind
STARCRAFT II
DEMONSTRATION
REPLAY
AlphaStar
37 /47
175 +811
64 +291
15
22
ORACLE
BLIZZARD ENTERTAINMENT

24



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Dette spillets teori / design

- Ingen «alltid vinnende» eller beste strategi
- Imperfekt informasjon (ikke som sjakk der en ser hele brettet hele tiden)
- Krever langsiktig planlegging (opp til en time spill)
- Sanntids handlinger –kontinuerlig action
- Stort handlingsfelt
  - Hundrevis av enheter og bygninger må kontrolleres samtidig
  - 10-26 valgmuligheter i hver situasjon …
- Uhyre komplekst

26

er ikke dette også hva

prosjektledelse

handler om?

27

hva er

spill?

28

Vygotsky (1933) sees play as a particular feature of pre-school age. He sees a strong connection between play and imagination, defining 'imagination' as play without action.

29

Huizinga (1938) emphasizes the importance of play as a way of learning; when children emulate adult behavior through play, this allows them to practice future necessary skills in a safe and 'playful' environment.

30

HVILKE FUNKSJONER HAR SPILL ?

Bruner (1972) sees play as having two important functions. The first function of play is that it minimizes the consequences of a player's actions, thereby providing a situation with less risks than a real-world situation. The second function of play is that it allows a player to try combinations of behavior that in a real-world situation would never be tried, thereby providing an opportunity for learning

31

SPILL ELLER SIMULERING?

32

HVA ER SAMMENHENGEN?

33

Sauvé, L., Renaud, L., Kaufman, D., & Marquis, J. S. (2007). Distinguishing between games and simulations: A systematic review. *Educational Technology & Society*, 10 (3), 247-256.

Distinguishing between games and simulations: A systematic review

Louise Sauvé[1], Lise Renaud[2], David Kaufman[3] and Jean-Simon Marquis[4]
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ABSTRACT

Based on the hypothesis that inconclusive research results with regard to the impact of games and simulations are linked to the absence of clear concept definitions, research was undertaken to fill this methodological gap by identifying the essential attributes of games and simulations. This paper first introduces the context for our study. This is followed by a description of the analysis grid used to create a database of the literature, and the methodology employed to conduct our systematic review of this literature. The essential attributes of games and simulations are then described and the distinctions between these two concepts are presented.

Keywords

Game, Simulation, Learning, Education

34

, L., Renaud, L., Kaufman, D., & Marquis, J. S. (2007). Distinguishing between gam
y. *Educational Technology & Society*, 10 (3), 247-256.

Distinguishing between games and simulations: A

Louise Sauvé[1], Lise Renaud[2], David Kaufman[3] and Jea
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[4]Télé–Université, Québec, Canada // jsmarquis@savi

35

INKONSISTENT TERMINOLOGI

"This article rises out of frustration, the frustration from reading a wide variety of papers each using words like simulation, game, role playing, gaming, and symbolic modelling either without definition or inconsistency from one work to another."

36

HVA KJENNETEGNER SPILL

A game is a fictitious, whimsical or artificial situation in which players are put in a position of conflict. At times, players square off against one another; at other times, they are together and are pitted against other forces. Games are governed by rules which structure their actions in view of an objective or a purpose which is to win, to be victorious or to overcome an obstacle. They are integrated into an educational context when the learning objectives are associated formally to the content and the game enhances learning in the cognitive, affective and/or psychomotor domains.

37

HVA KJENNETEGNER SIMULERINGER

On the contrary, simulation is a simplified, dynamic and precise representation of reality defined as a system. A simulation is a dynamic and simplified model of reality and it is judged by its realism, by its correspondence to the system which it represents.

38

A game is created without any reference to reality, what is never the case for a simulation or a simulation game. Simulation is not necessarily a conflict, a competition, and the person who uses it is not looking to win, what is the case in a game.

39

GAMING VS SIMULERING

The key determining factor is their main purpose. Games are only for entertainment, whereas simulations are developed to train or develop certain skills.

Rumeser og Emsley 2018

40

Serious games **or *educational games*,** combine the characteristics of a game and a simulation

Rumeser og Emsley 2018

41

SPILL ELLER SIMULERING?

nrk Nyheter Sport Kultur Distrikt Mer

Innlandet Tips oss Radio TV Langlesing

Sander (15) har sin eigen Boeing 737 på guterommet

BJONEROA (NRK): Sander Slette har brukt tre år på å bygge sin eigen flysimulator. No har han også fått fly på ordentleg.

BYGD PÅ EIGAHAND: Sander Slette (15) har ein heilt egen cockpit på guterommet.

Hans Andreas Solbakken
Journalist

Geir Randby
Journalist

Eilin Spolèn Juva
Journalist

Publisert 8. apr. kl. 18:29
Oppdatert 9. apr. kl. 15:33

42

43

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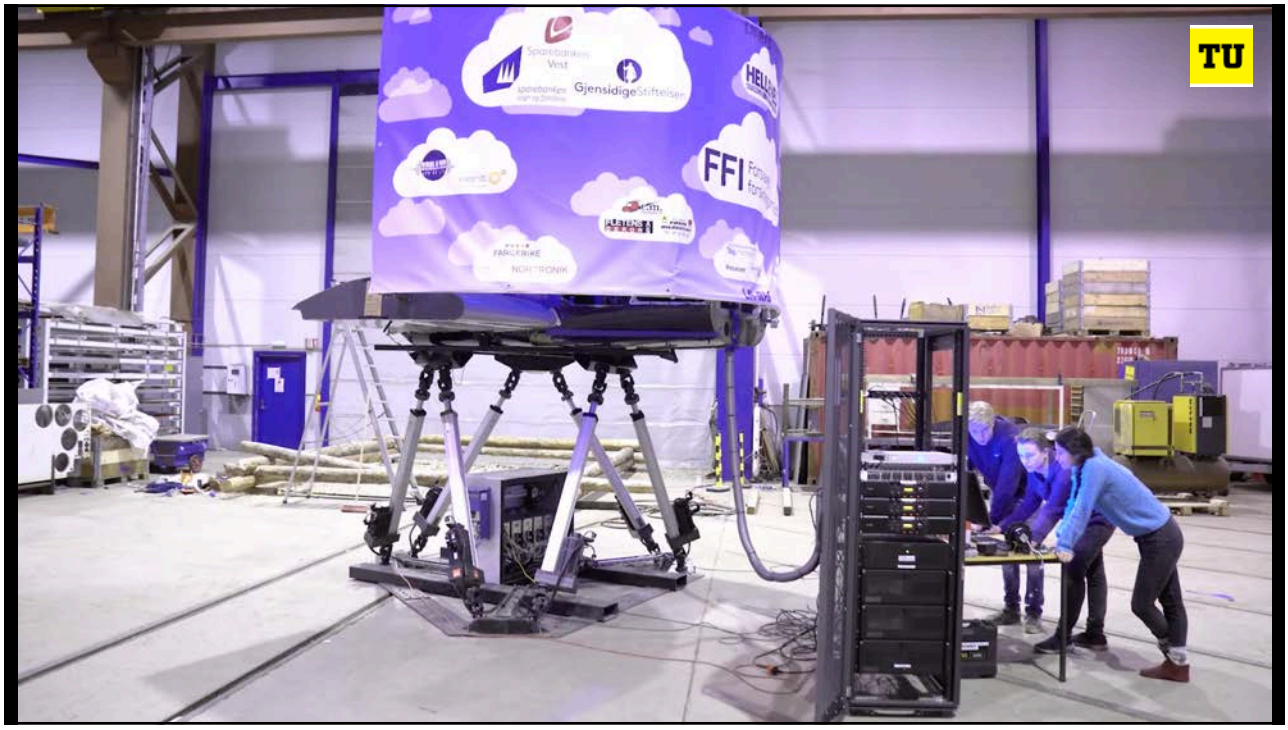

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FLYSIMULATOR I FØRDE

TU

Hodejaget av Norges råeste flysimulatormiljø

De unge oppfinnerne i Reodorklubben i Førde er i ferd med å utvikle en flysimulator som Forsvarets Forskningsinstitutt ikke har sett maken til. Nå tar samarbeidet av.

46

HYDRO ØVER MED DATASPILL

TU

Trente dataspill før de begynte i Hydros hypermoderne pilotanlegg

– Vi slipper å lære på den harde måten.

THOMAS FØRDE, INDUSTRI 19. JAN. 2019 - 22:28

47

SIMULERING

Keep Calm and Carry On:

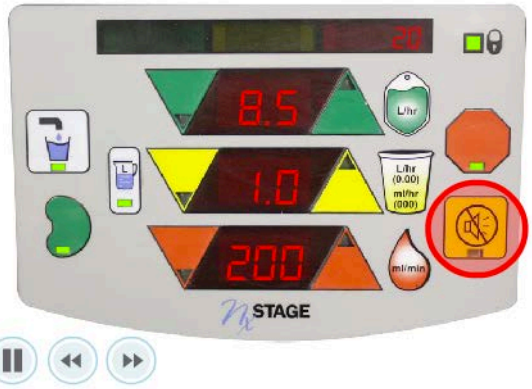
Cycler Alarms | PureFlow Alarms

responding to alarms

Alarm 20 : Demo

You were 30 minutes into treatment when a 20 Alarm sounded.

- **Press MUTE** to silence the alarm.
- Then identify and fix the cause. **Click the button** of the area you want to investigate.



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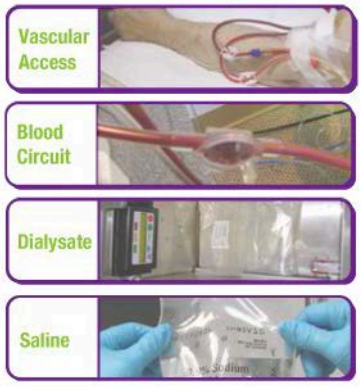

Back Next Page of

48

hvilke komponenter?

49

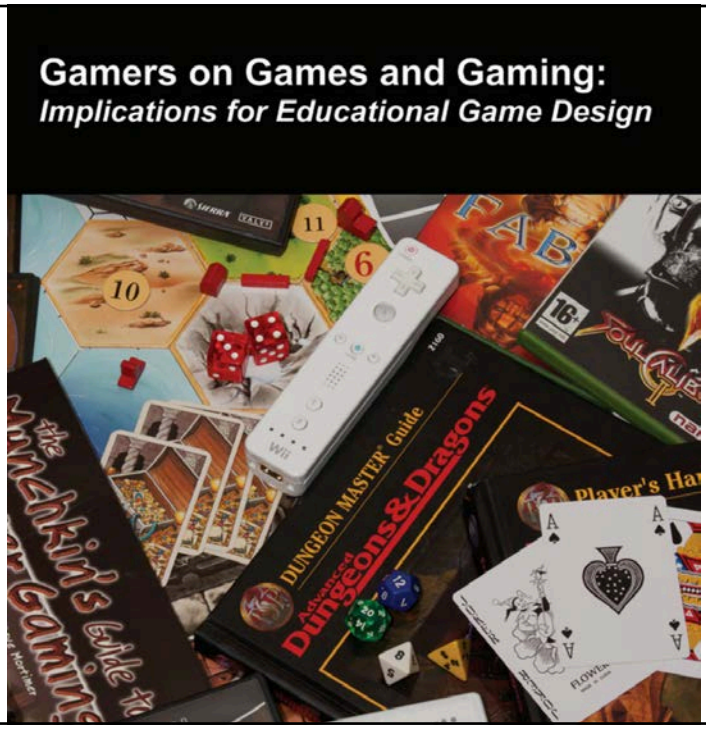

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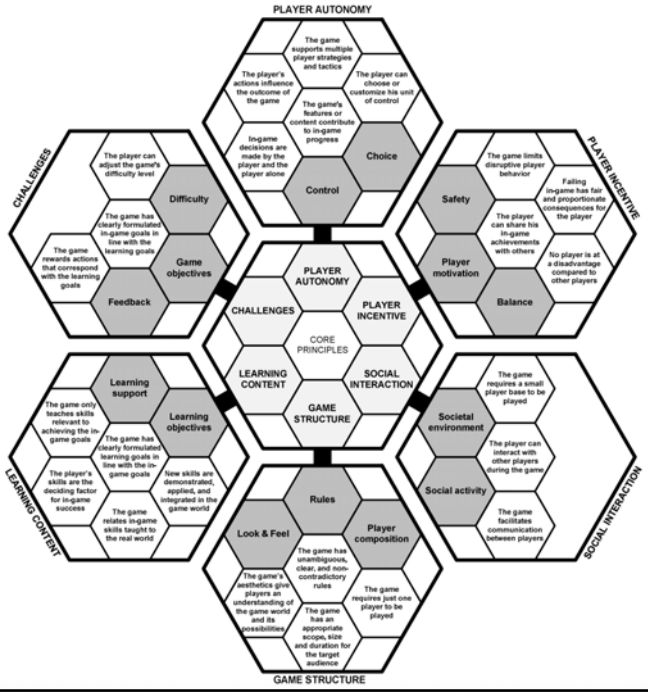
Figure 22. Core principles for educational game design

51



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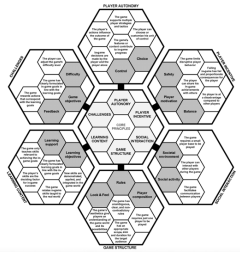

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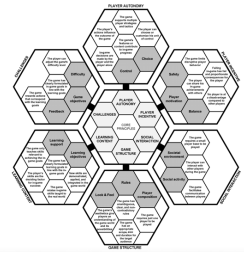

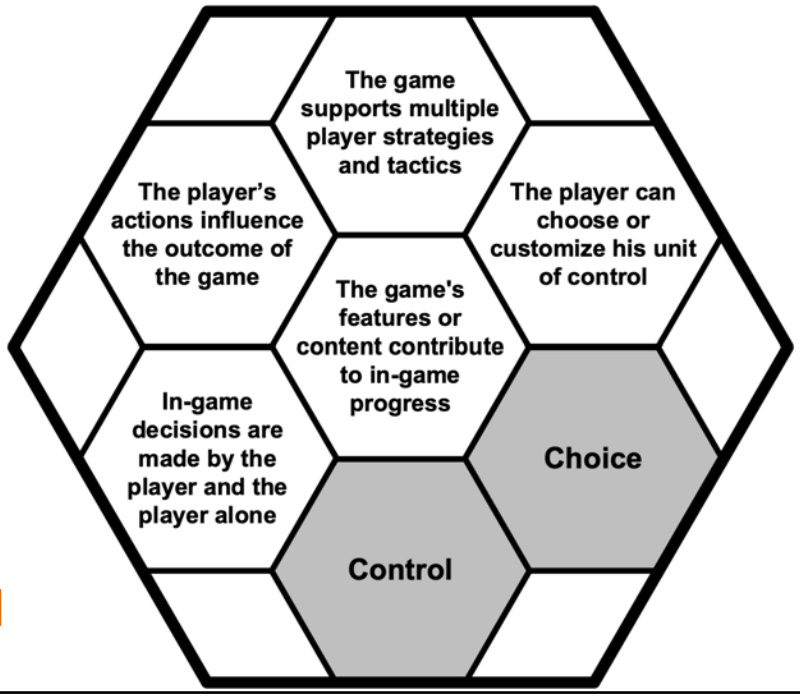

AUTONOMI

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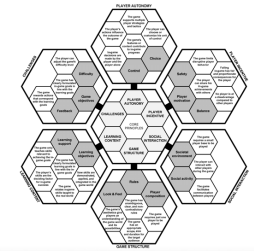

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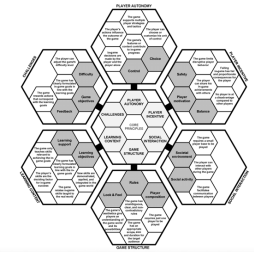

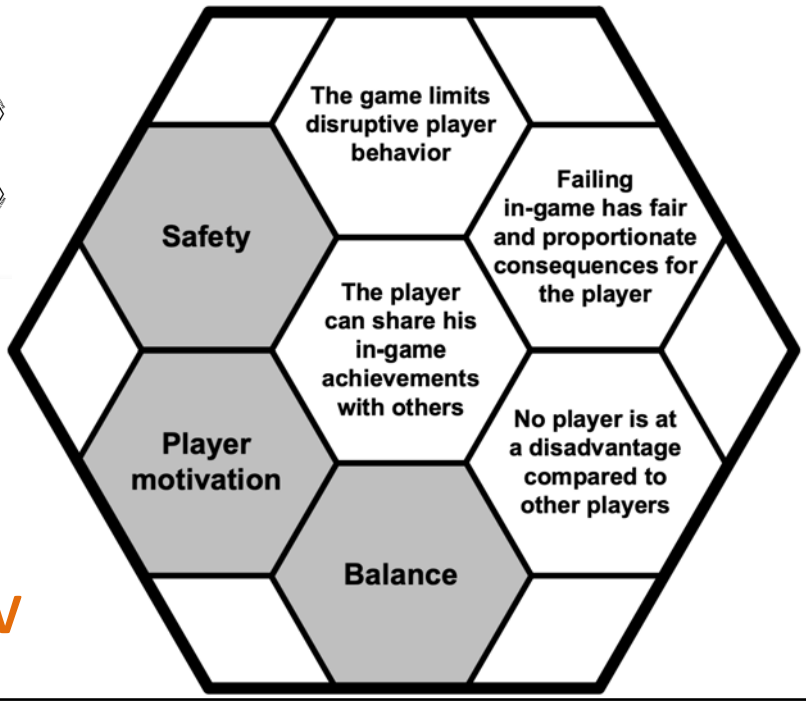

INCENTIV

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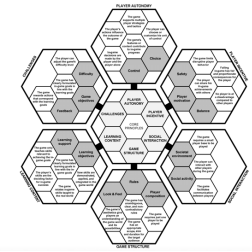

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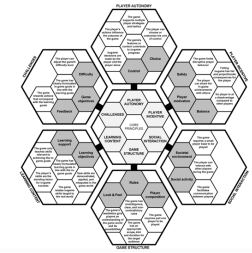
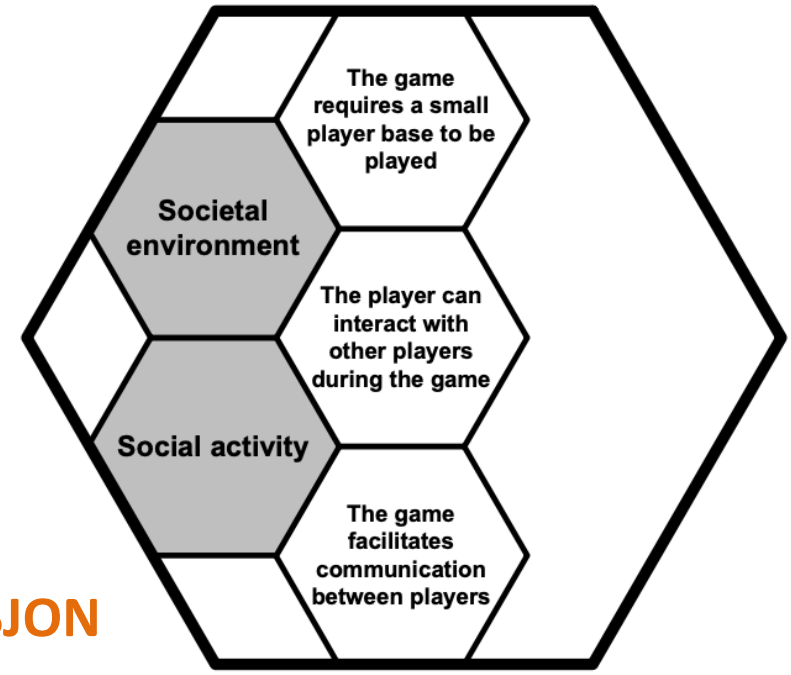


SOSIAL INTERAKSJON



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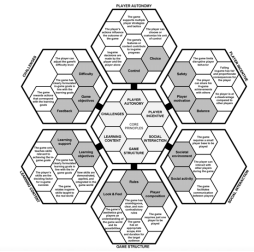

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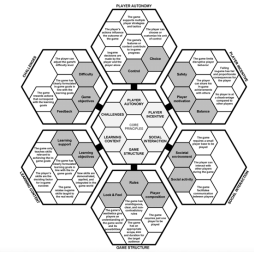

Rules

Look & Feel

Player composition

The game has unambiguous, clear, and non-contradictory rules

The game's aesthetics give players an understanding of the game world and its possibilities

The game requires just one player to be played

The game has an appropriate scope, size and duration for the target audience

SPILLSTRUKTUR

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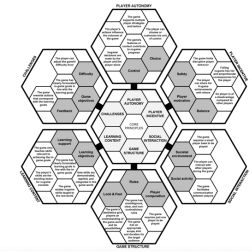

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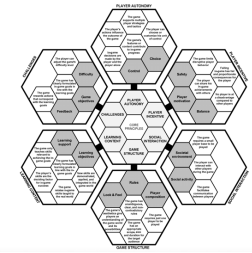
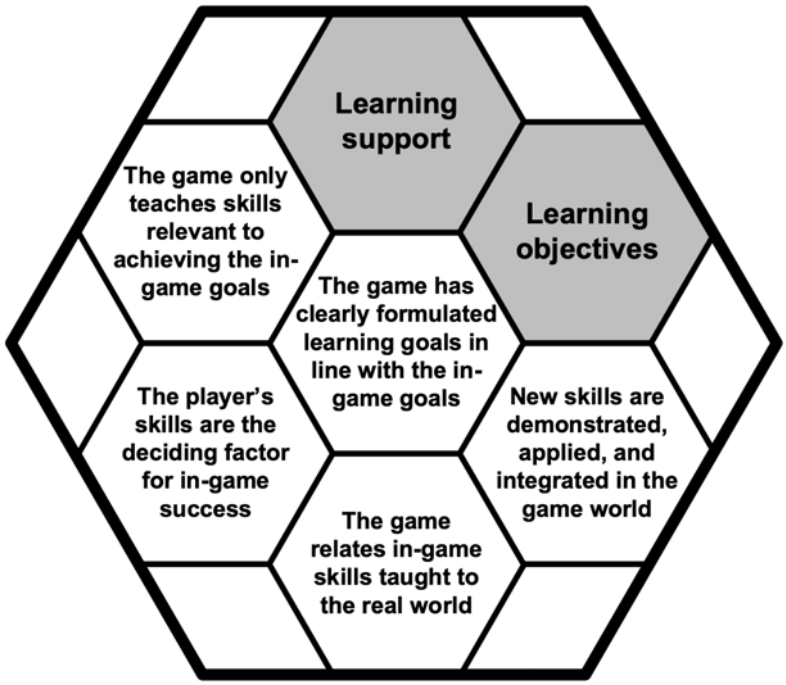


LÆRENDE INNHOLD



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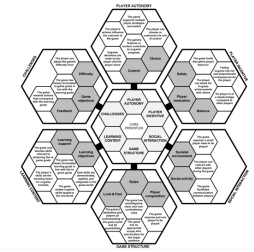

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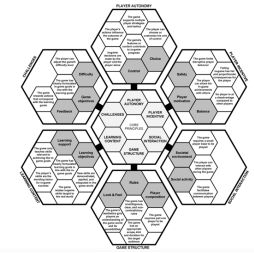


The player can adjust the game's difficulty level

Difficulty

The game has clearly formulated in-game goals in line with the learning goals

Game objectives

The game rewards actions that correspond with the learning goals

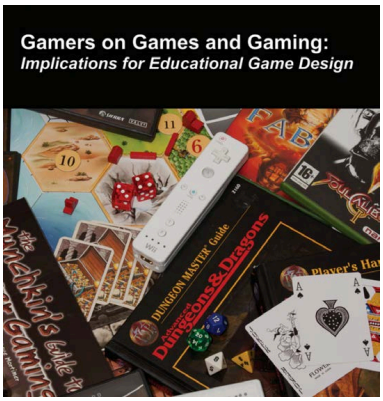
Feedback

UTFORDRINGER

64

6 DIMENSJONER I SPILLUTVIKLING

- AUTONOMI
- SPILLSTRUKTUR
- INCENTIVER
- SOSIALE RELASJONER
- INNHOLD/NARRATIV
- PROSESS / UTFORDRINGER



65

HVA ER GAMEPLAY

Gameplay is the specific way in which players interact with a game, and in particular with video-games.Gameplay is the pattern defined through the game rules, connection between player and the game challenges and overcoming them, plot and player's connection with it.

Lindley C.A. (2004) Narrative, Game Play, and Alternative Time Structures for Virtual Environments. In: Göbel S. et al. (eds) Technologies for Interactive Digital Storytelling and Entertainment. TIDSE 2004. Lecture Notes in Computer Science, vol 3105. Springer, Berlin, Heidelberg

66

HVILKE TYPER SPILL?

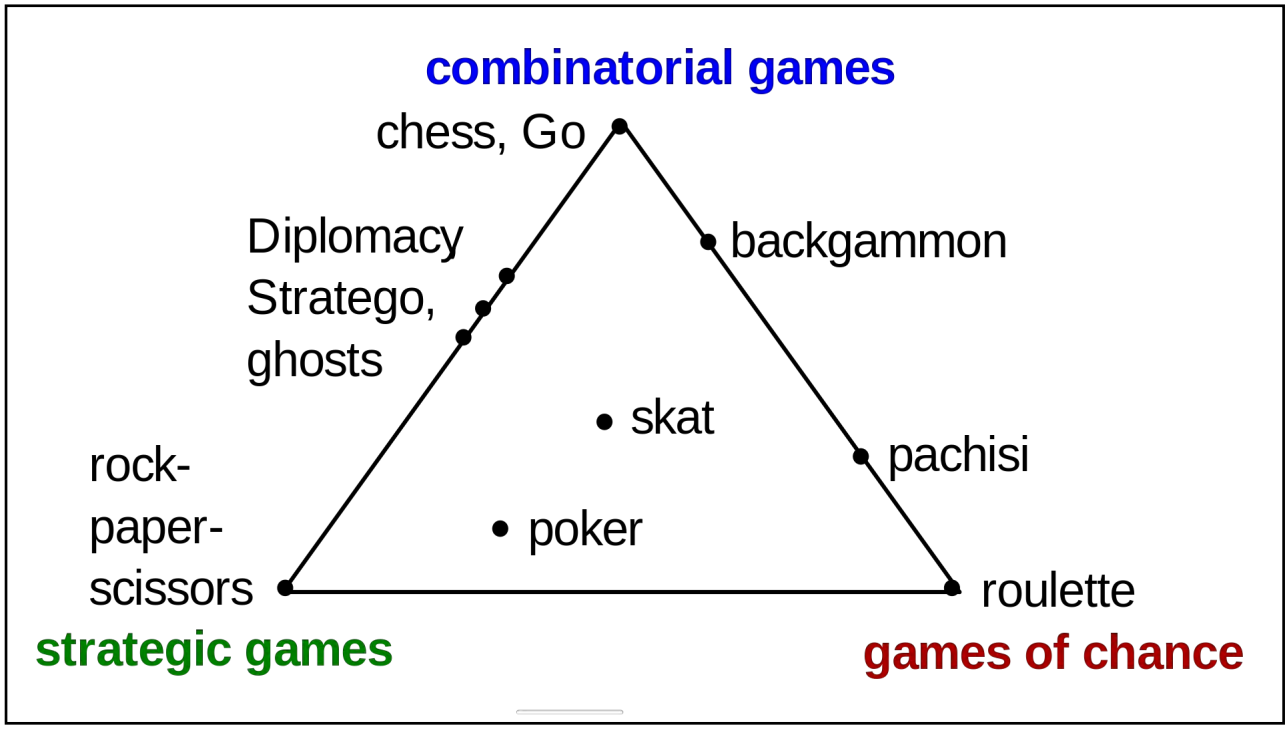
69

Hvilke typer spill?

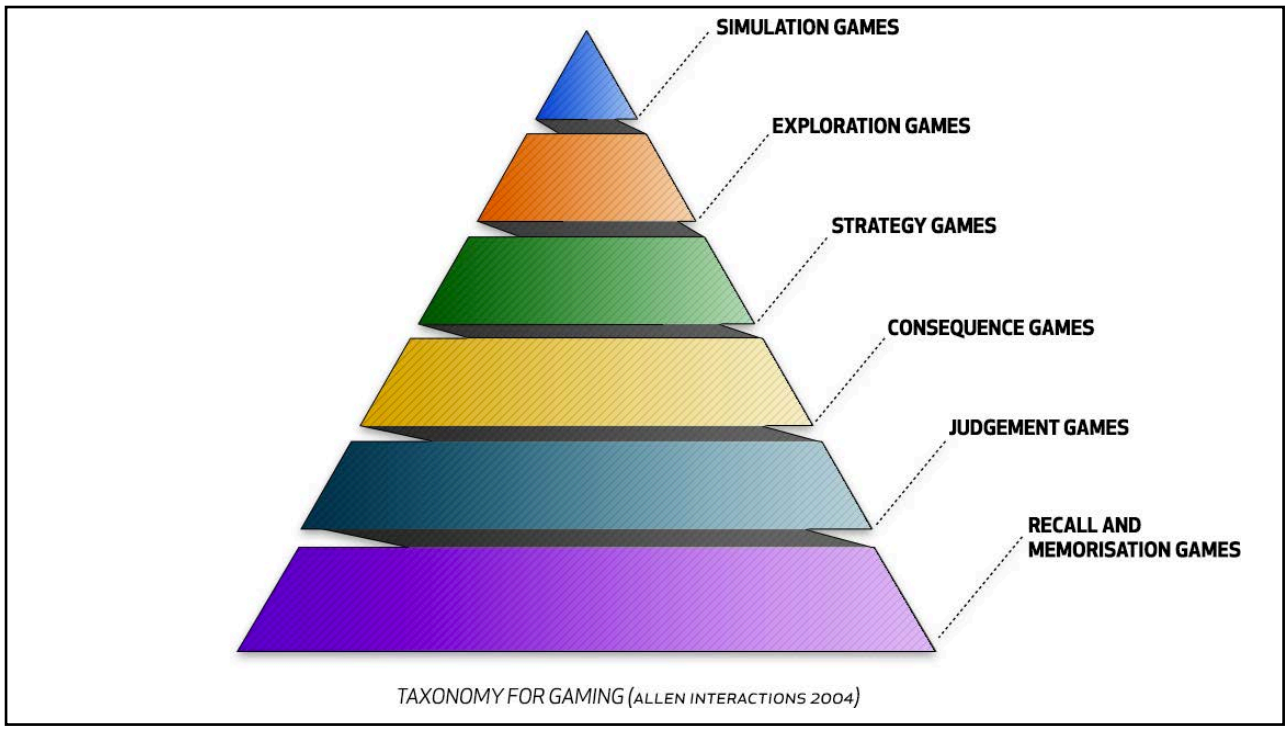
- STRATEGISPILL
  - Sjakk, GO
- SANNSYNLIGHETSSPILL
  - lotto
- ROLLESPILL
  - Virtuelle verdener
- FYSISKE FERDIGHETS-SPILL
  - Nintendo wii

Utviklet fra Caillois (1958)

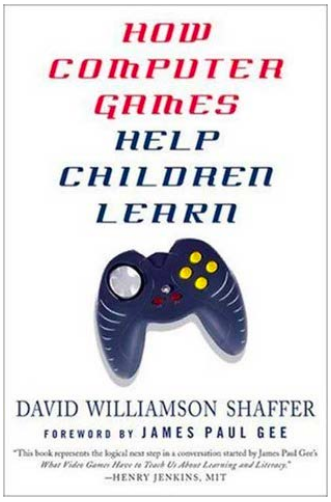
70


combinatorial games
chess, Go
Diplomacy
Stratego,
ghosts
backgammon
skat
pachisi
rock-
paper-
scissors
poker
roulette
strategic games
games of chance

71


SIMULATION GAMES
EXPLORATION GAMES
STRATEGY GAMES
CONSEQUENCE GAMES
JUDGEMENT GAMES
RECALL AND
MEMORISATION GAMES
TAXONOMY FOR GAMING (ALLEN INTERACTIONS 2004)

72



epistemic games

73

spill handler også om

læring

75

Illeris def læring

"Any process that in humans leads to permanent capacity change and which is not solely due to biological maturation or ageing."

76

5 prinsipper for læring:

Hermundur Sigmundsson

-Må ha ytre stimulering
-Progresjon –må starte med det en kan
-Høy intensitet – øve (eks lære gå)
-Positive forsterkere skaper dopamin
Motivasjon for å øve…
-Må forstå når vi mestrer noe

77

"Consequently, all learning always includes three dimensions – the cognitive dimension of knowledge and skills, the emotional dimension of feelings and motivation and the social dimension of communication and cooperation – all of which are embedded in a societally situated context (Illeris, 2004, p. 82)."

78

3 DIMENSJONER VED LÆRING

- **KOGNITIVE**
  - Kunnskap og ferdigheter
- **EMOSJONELLE**
  - Følelser og motivasjon
- **SOSIALE**
  - Kommunikasjon og samarbeid

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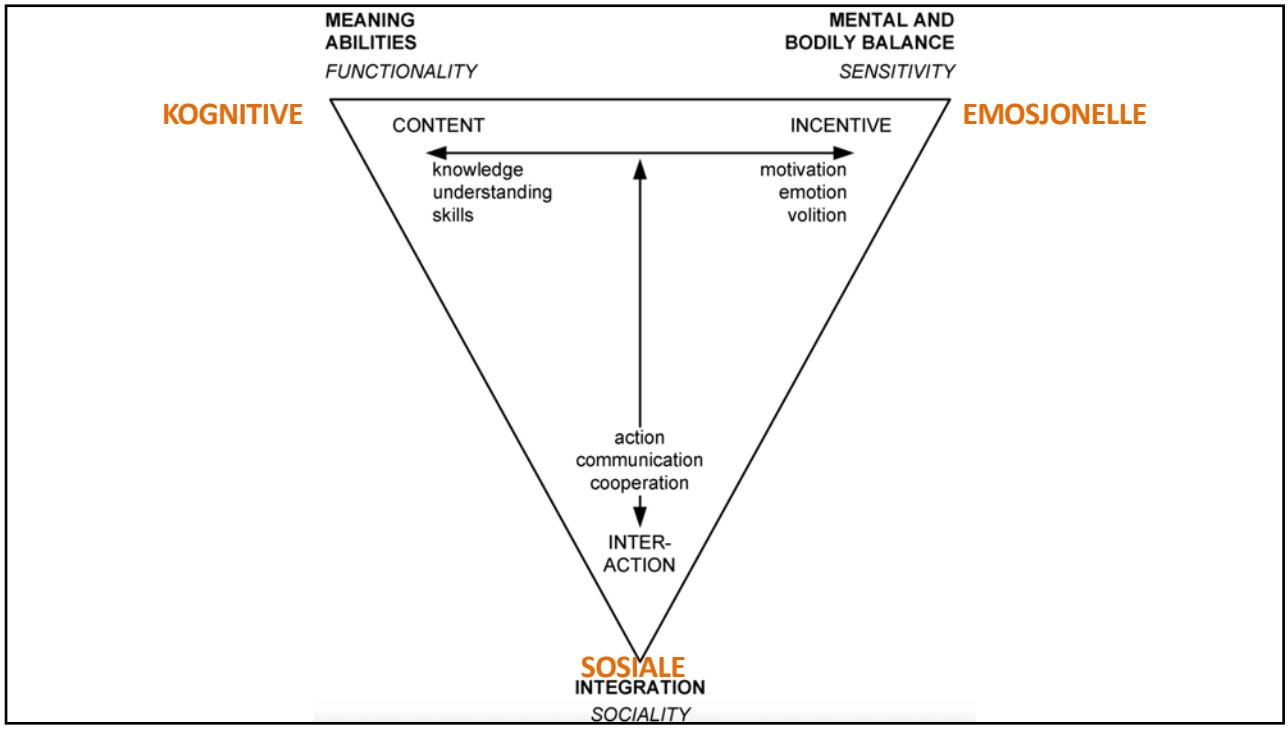

80

3 dimensjoner ved

læringbegrepet

81

The **content dimension** focuses on cognitive abilities: knowledge, understanding, and skills. With regards to learning content in games, very little research has been done on which types of knowledge, understanding, and skills can be taught through games. No definitive claims can be made about what can and what cannot be taught through games. Yet, Dieleman & Huisingh (2006) argue that games potentially play an important role in all four of Kolb's stages of experiential learning and its related types of knowledge.

82

The **incentive dimension** focuses on affective abilities: motivation, emotion and volition. In games this relates to intrinsic motivation, which is derived from a player's competence, autonomy, and relatedness. It also relates to the 'flow experience' which describes a state of complete absorption or engagement in an activity, and which can be achieved when the challenges that a game offers match the skills of the player (Csikszentmihalyi, 1975, 1990).

83

The **interaction dimension** focuses on social abilities: action, communication, and cooperation. Illeris (2007) argues that all learning is 'situated learning', meaning that the learning takes place in a certain situation or 'learning space'. This given situation determines the possibilities for learning; i.e. the content which can be learned and the incentives for learning that are part of that situation.

84

6 prinsipper for spilldesign

- Narrativ – må ha en historie som gir spillet kontekst og mening
- Emosjoner – spillet må frembringe følelser som motiverer for fortsatt spill
- Gjentakelse – syklisk mønster der repetisjon skaper mestring
- Økt vanskelighetsgrad – skaper dypere engasjement
- Progresjon i handlingsforløpet
- Positive forsterkere skaper motivasjon

85

flyt

86

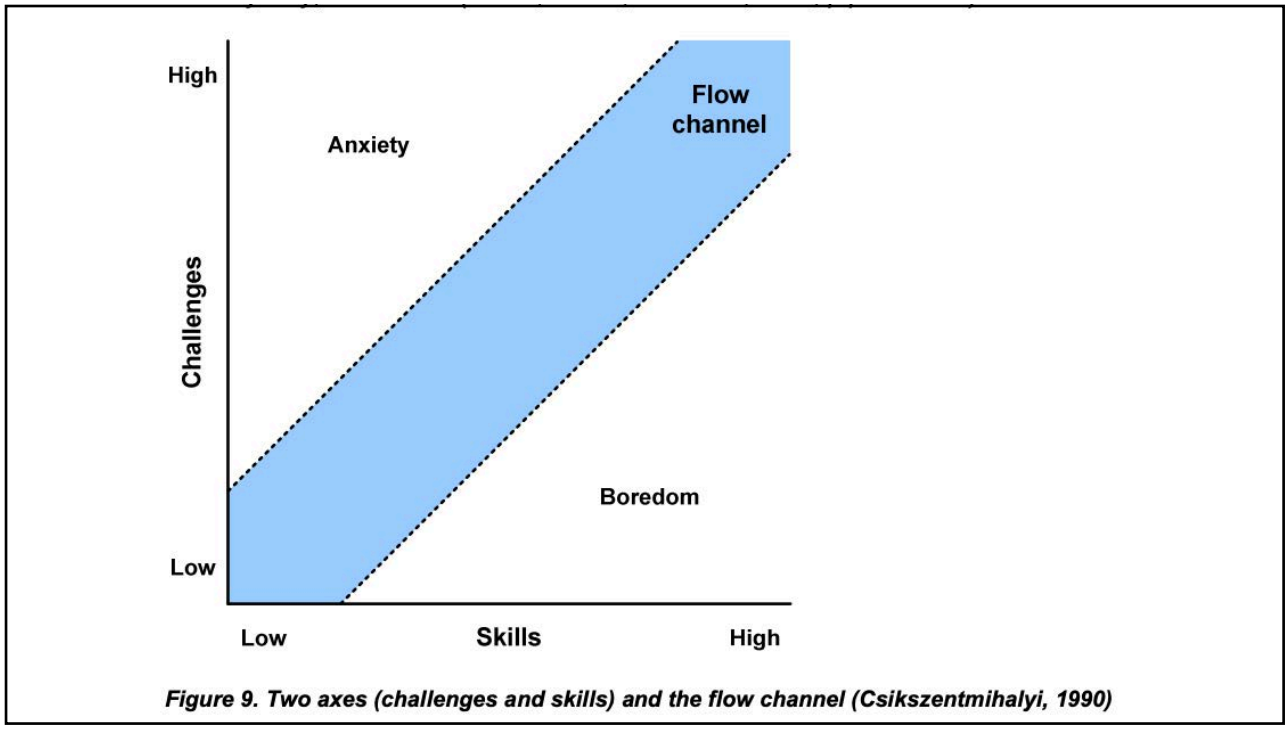

Figure 9. Two axes (challenges and skills) and the flow channel (Csikszentmihalyi, 1990)

87

hva slags ferdigheter

trenes?

88

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TEXT

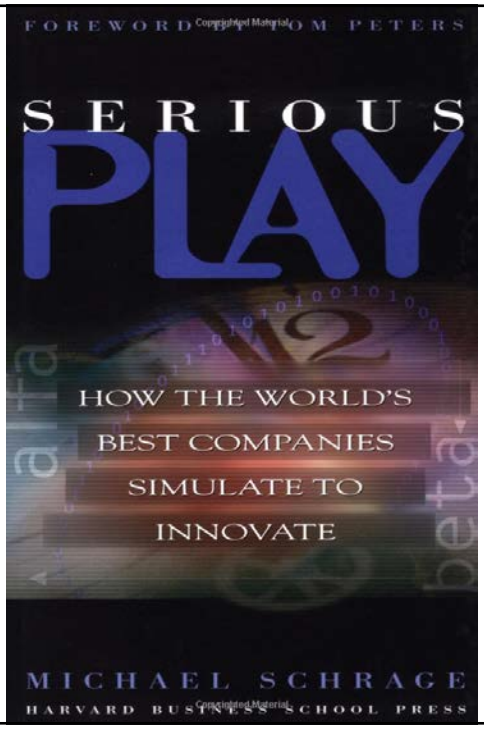
57

Can 'World of Warcraft' Game Skills Help Land a Job?

Some Job Seekers Add Experiences on Role-Playing Platform to Résumés, LinkedIn

Some game players worry about touting their 'World of Warcraft' interest on their résumés. Above, a 'Warcraft' exhibit at Gamescom 2013 in Cologne, Germany. REUTERS

90

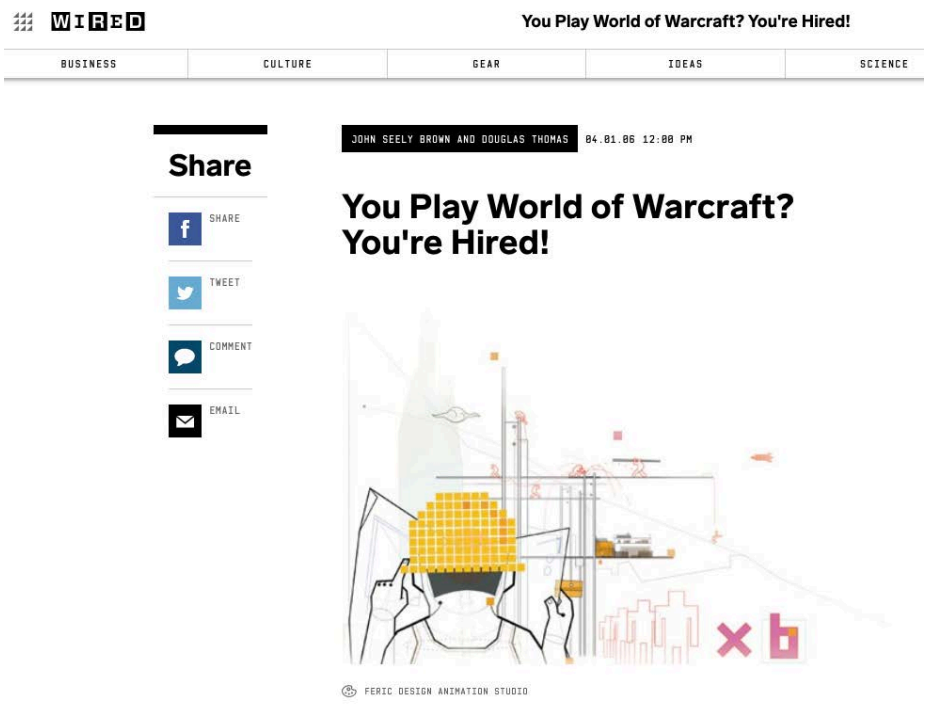


Successful innovation demands more than a good strategic plan; it requires creative improvisation.

Technological models can actually change us--improving the way we communicate, collaborate, learn, and innovate.

91

2006



92

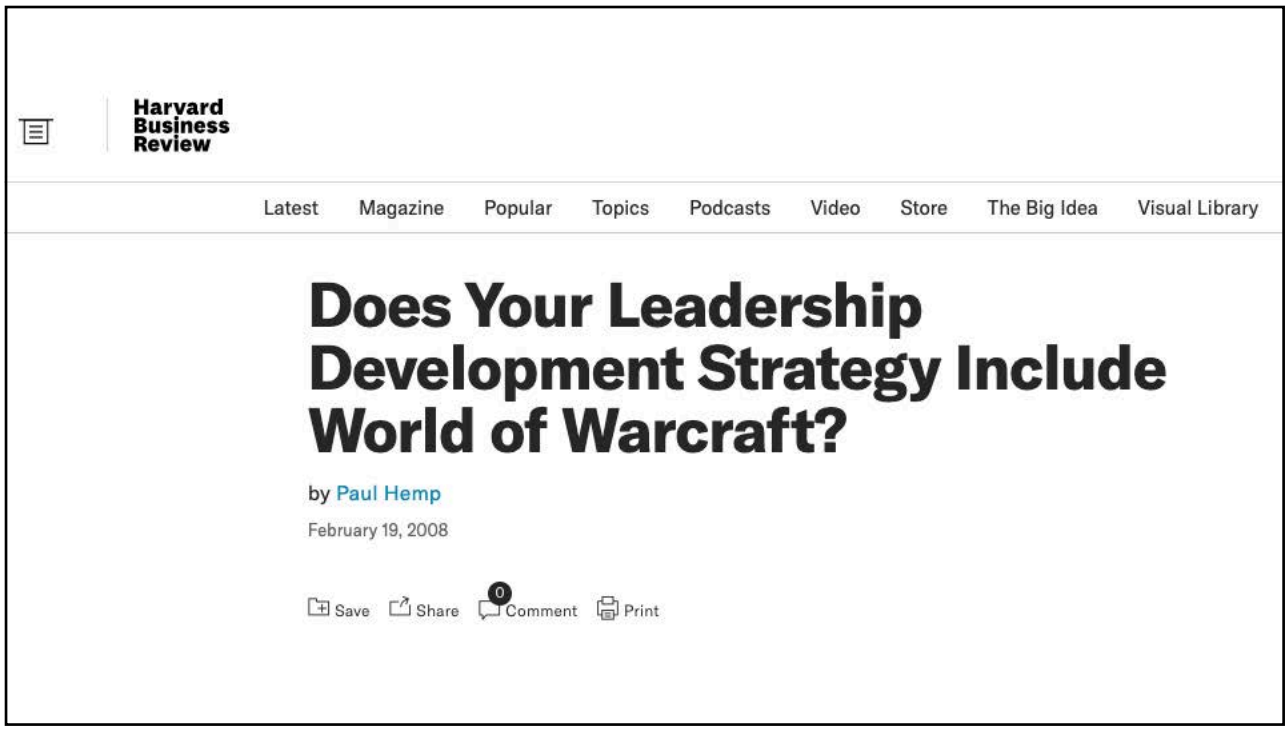
LUDISK ARBEID: EN PHD-AVHANDLING OM WORLD OF WARCRAFT

Å GJØRE LEKSER VAR KULT I WORLD OF WARCRAFT

Inspirasjonen til PhD-prosjektet mitt var egne opplevelser som spiller i World of Warcraft. Jeg undret meg over at jeg kunne så utrolig mye om denne spillverdenen; fra hvordan løse en serie oppdrag, eller hvilke spillere jeg kunne stole på, til hvor mange prosent sjanse det var for at en boss skulle gi en gitt skatt. Ikke minst fasinerte det meg at jeg hadde opparbeidet meg all denne kunnskapen uten studiepoeng, kurs eller læreplan. Og i motsetning til hvordan jeg opplevde mye av tiden min på skolebenken var spillverdenen et sted de «kule kidsa» var de som var flinke, kunnskapsrike og dedikerte.

Ask, Kristine (2016): *Ludic Work; Assemblages, domestications and co-productions of play.* Phd avhandling, Humanistisk Fakultet, NTNU.

93



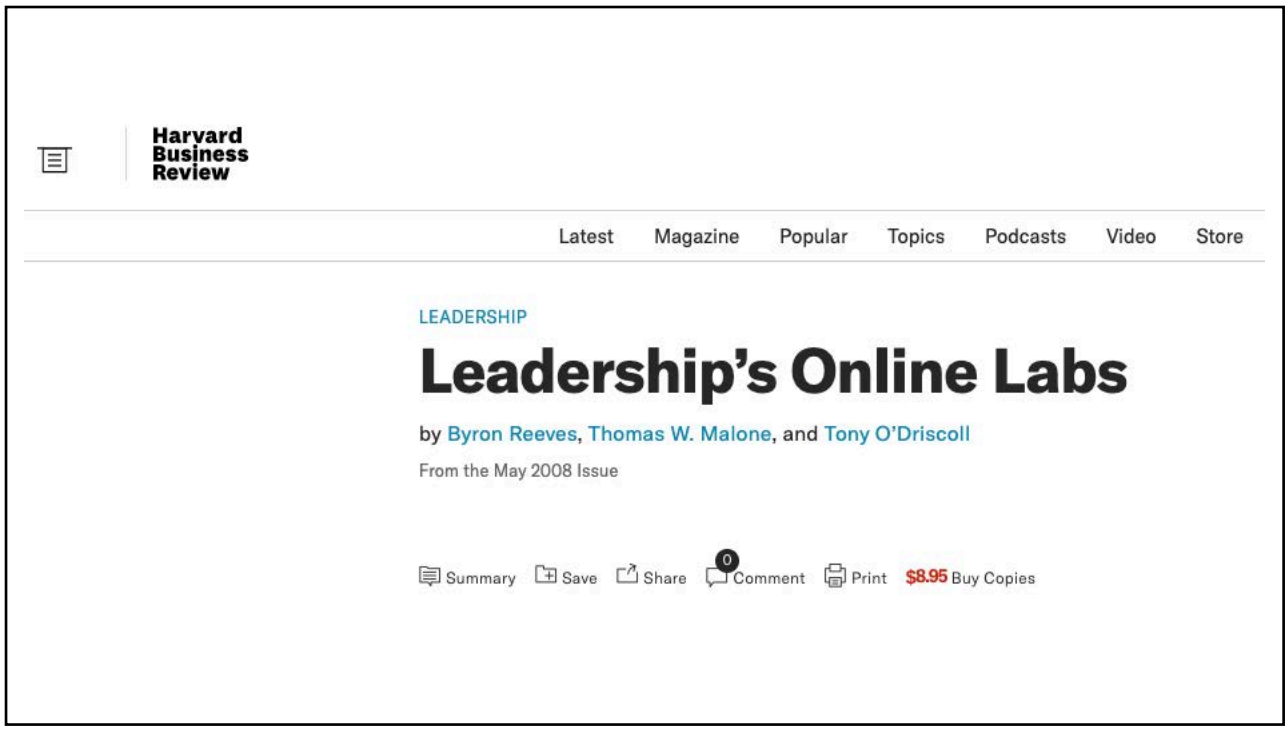
94

hva innebærer en

LEDERROLLE I WORLD OF WARCRAFT

I min rolle som raidleder hadde jeg ansvar for å sammenfatte og skrive strategier, sette sammen raidgruppen, fordele ansvar og passe inn tissepauser. Som offiser deltok jeg også på en rekke offisermøter, vurderte søknader fra nye medlemmer og utformet guildpolitikk.

95



96

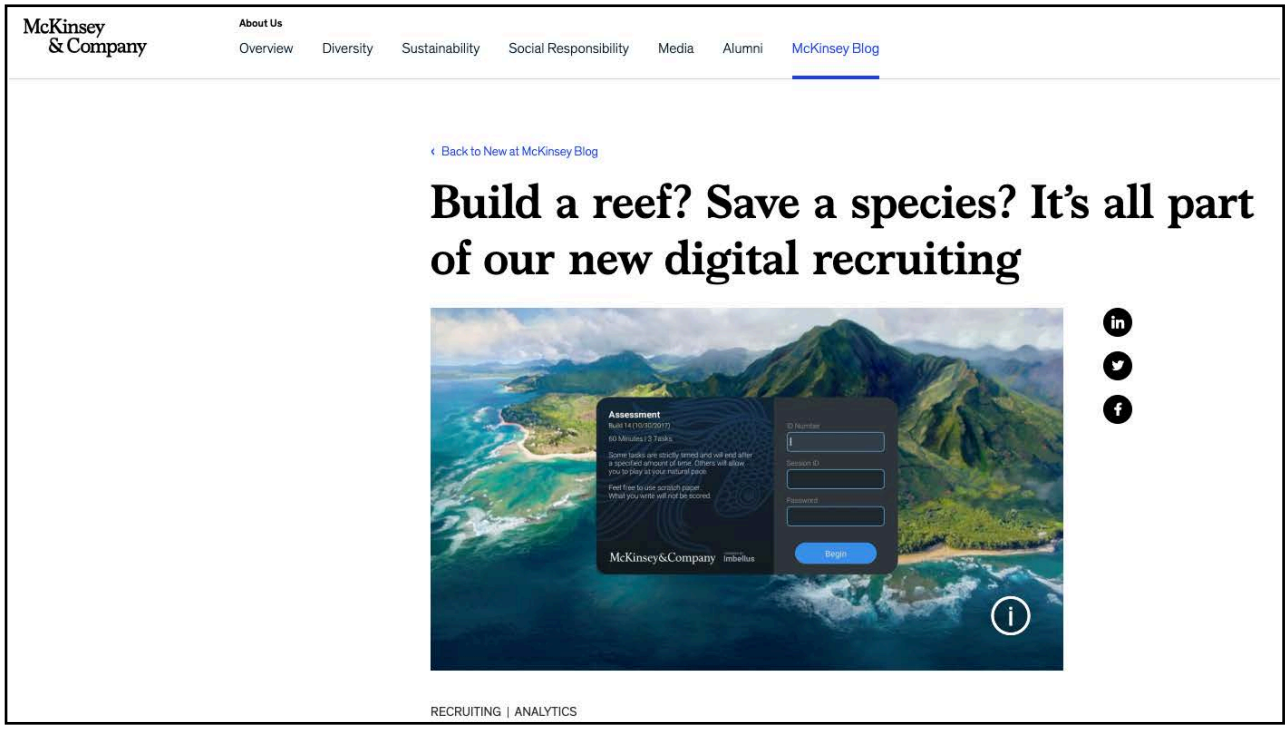
Leadership demands speed.

in a *World of Warcraft* battle that we recorded, a hastily formed team of 10 players decided who would lead the assault, assessed the strengths and weaknesses of its rivals from another team, formulated an attack plan, and coordinated battle assignments—all before the game clock had counted down one minute.

97

Among IBM managers with experience in multiplayer online games, nearly half said that being a game leader had improved their real-world leadership capabilities.

98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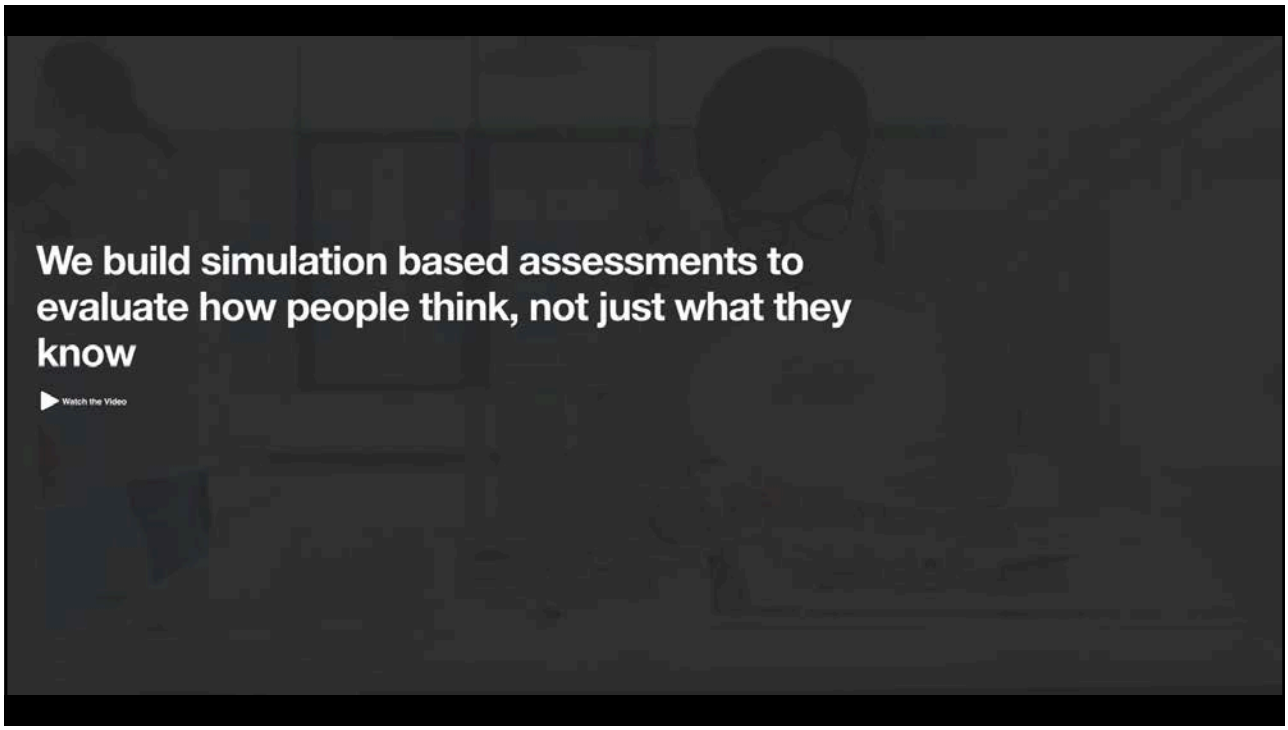

We build simulation based assessments to evaluate how people think, not just what they know
Watch the Video

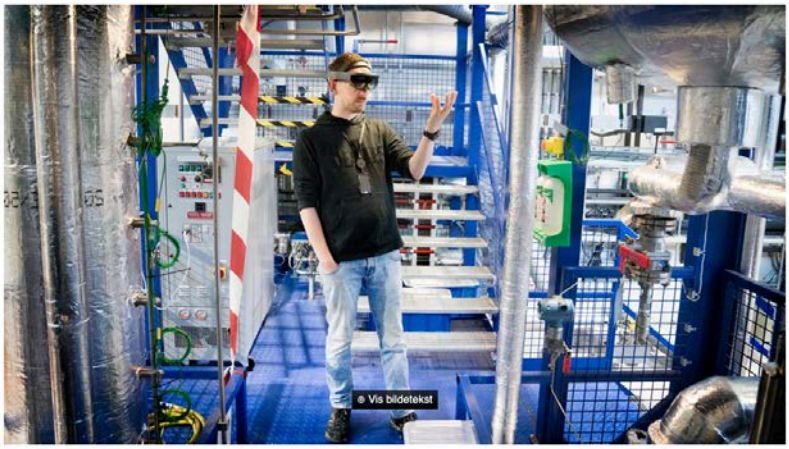
100

TU VR

EQUINOR

Equinor ansetter gamere til å ferdigstille oljeplattformer

Kan spare store kostnader.



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Nasjonalt kompetansesenter for psykisk helsearbeid

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KREATIVT I SAMARBEID MED BRUKERNE: Jose de Jager bruker Virtual Reality-eksponering i behandling mot sosial angst, sammen med brukere med alvorlige psykiske helseutfordringer, som psykoselidelser og lignende. Dette er del av en studie, der flere behandlingssentre i Nederland deltar.

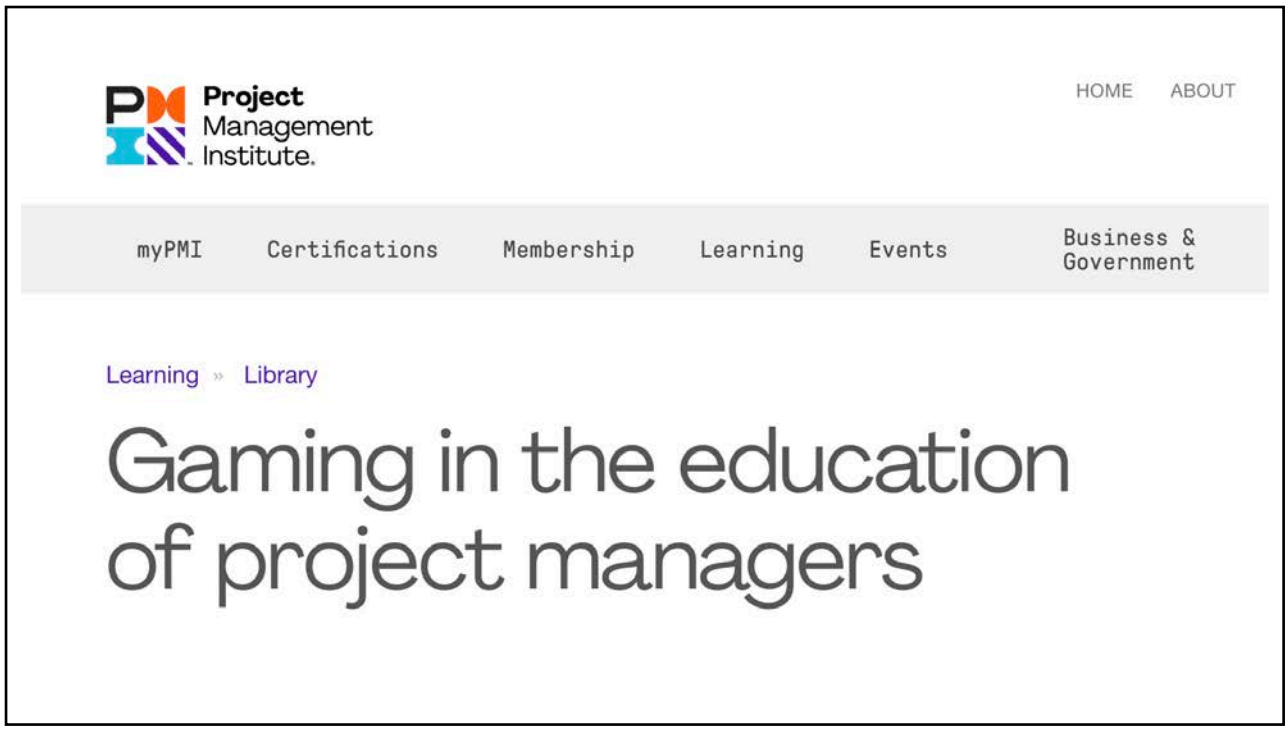
Gode resultater med bruk av Virtual Reality i behandling

En multisenter-RCT-studie i Nederland viser gode resultater med bruk av Virtual Reality i behandling for personer med alvorlige psykiske lidelser.

102

EKSPONERINGSTERAPI

103



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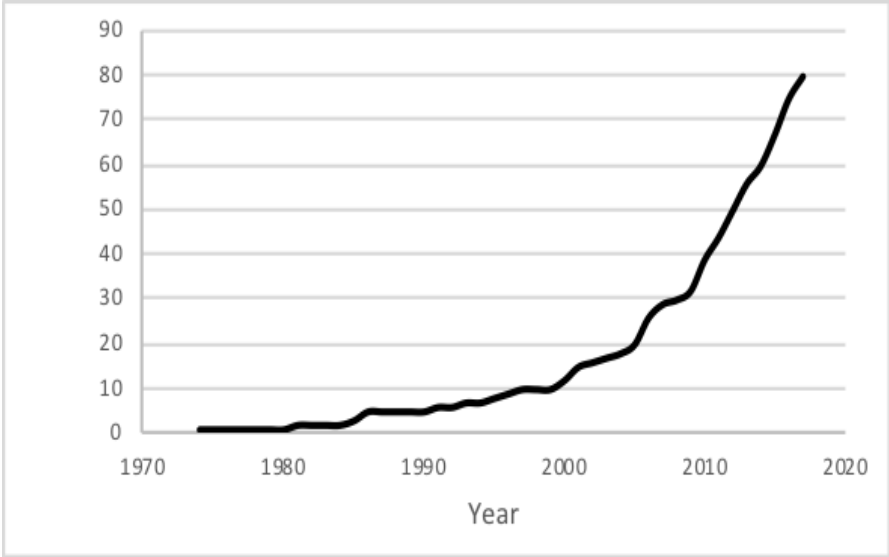
Kumulativt antall »project management games» i litteraturen



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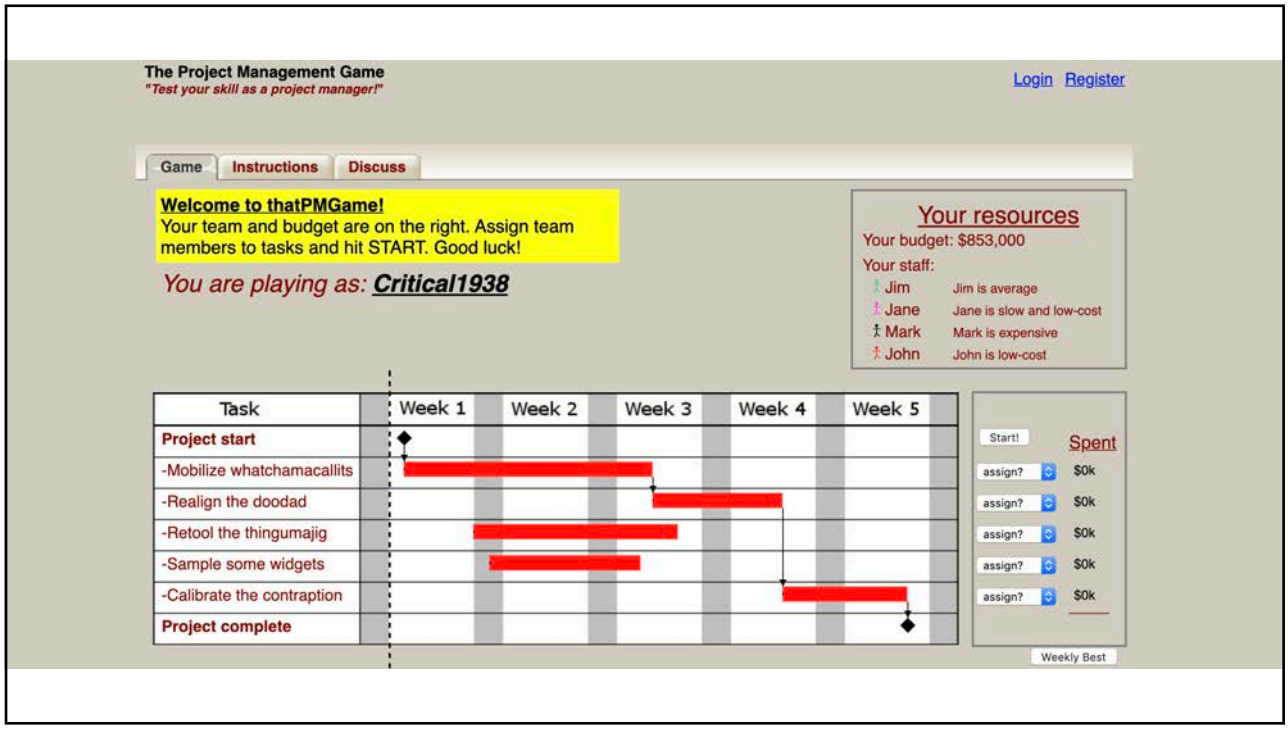
The Project Management Game
"Test your skill as a project manager!"
Login Register
Game
Instructions
Discuss
Welcome to thatPMGame!
Your team and budget are on the right. Assign team members to tasks and hit START. Good luck!
You are playing as: Critical1938
Your resources
Your budget: $853,000
Your staff:
Jim Jim is average
Jane Jane is slow and low-cost
Mark Mark is expensive
John John is low-cost
Task
Week 1
Week 2
Week 3
Week 4
Week 5
Project start
-Mobilize whatchamacallits
-Realign the doodad
-Retool the thingumajig
-Sample some widgets
-Calibrate the contraption
Project complete
Start!
Spent
assign? $0k
assign? $0k
assign? $0k
assign? $0k
assign? $0k
Weekly Best

107

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Gaming in the education of project managers

Gaming is the new paradigm in experiential adult learning and, as such, needs to be considered in the design and execution of any new project management workshop.

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