



LÆRINGSFESTIVALEN 2017

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THE AWESOME WORLD OF  
GAMIFICATION

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# DIGITAL GAMES

- ▶ **Games at home:**

- ▶ 96% boys, 76% girls between ages 9-16 play digital games regularly  
(Norwegian Media Authority, 2016)

- ▶ **Games in school:**

- ▶ Commercial og serious games already common
- ▶ Gamification: use of game elements in non-game settings  
(Deterding, Dixon, Khaled, & Nacke, 2011)

- ▶ **Games in society:**

- ▶ Public debate based on technological determinism
- ▶ 21. century —> ludification of culture?  
(Ask, 2016; Deterding et al., 2011; Sørensen, 2006; Berg, 1998)

# GAMIFICATION

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- ▶ Has been shown to have positive effects and benefits on motivation and learning  
(Deterding et al., 2011; Hamari, Koivisto, & Sarsa, 2014b; Kapp, 2012; Ready, 2016)
- ▶ What characterizes a successful gamified learning environment?
- ▶ To what extent is gaming experience a significant factor?

- ▶ **My case: Heimdall's Quest**





Madeleine "Hella" Lorås

The Peasant God



States

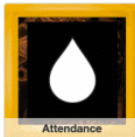
HP: 9001 / 9001    Mana: 5 / 9001  
XP: 1000 / 2500 to next rank (Svein)  
Unused runes: 1

States

Powers - [browse power trees](#)



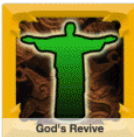
Give XP



Attendance



Give damage



God's Revive



Warm Hands

Player log

X	<b>Purchased Warm Hands</b> Purchased Warm Hands for 1 runes.	submitted by [system] at 2017-02-15 14:44:06	HP: 0 XP: 0	MANA: 0 RUNES: -1
X	<b>Gave damage</b> Reason: Tetris-gaming in class	submitted by [system] at 2017-02-15 11:52:51	HP: 0 XP: 0	MANA: 0 RUNES: 0
X	<b>Gave 50 XP</b> Reason: Won wiki-race	submitted by [system] at 2017-02-15 10:30:48	HP: 0 XP: 0	MANA: 0 RUNES: 0
X	<b>Gave 50 XP</b> Reason: Won wiki-race	submitted by [system] at 2017-02-15 10:21:25	HP: 0 XP: 0	MANA: 0 RUNES: 0
X	<b>Gave 50 XP</b> Reason: Won wiki-race	submitted by [system] at 2017-02-15 10:21:03	HP: 0 XP: 0	MANA: 0 RUNES: 0

Town of Class 1

Team 1

<b>Student 1</b> Thrall Skald Scribe Illusionist Viking	Active 67 min	HP: 12 / 50    Mana: 0 / 30 XP: 6350 / 8000 to next rank (Fri-Hals)
<b>Student 2</b> Drang Brewer Narr	Active 67 min	HP: 27 / 35    Mana: 25 / 35 XP: 5923 / 6000 to next rank (Thrall)
<b>Student 3</b> Fri-Hals Skald Druwid	Active 67 min	HP: 14 / 30    Mana: 3 / 40 XP: 8547 / 10000 to next rank (Thegn)

Death penalties

Death Penalty 2: Cosmic Shift The Internet has stopped working for you. 1 day penalty.
Death Penalty 3: Banishment You are excommunicated from your group. You do not belong to a group during this time. All benefits from being in a group are void until banishment ends. 3 days penalty.
Death Penalty 4: Imprisonment You must work in isolation. 3 days penalty.
Death Penalty 5: Hard Mode All XP you earn is reduced by 50 %. All Mana cost to use powers is increased by 50 %. 4 days penalty.
Programmed by <a href="#">Data Stavdahl</a> , 2015-2016 <a href="#">Open-source licenses</a>

HEIMDALL'S QUEST

Madeleine "Hella" Lorås

The Peasant God



#### States

HP: 9001 / 9001 Mana: 5 / 9001  
XP: 1000 / 2500 to next rank (Svein)  
Unused runes: 1

#### States

### Town of Class 1

#### Team 1

##### Student 1

Thrall Skald Scribe Illusionist Viking



HP: 12 / 50 Mana: 0 / 30  
XP: 6350 / 8000 to next rank (Fri-Hals)

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Drang Brewer Narr



HP: 27 / 35 Mana: 25 / 35  
XP: 5923 / 6000 to next rank (Thrall)

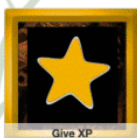
##### Student 3

Fri-Hals Skald Druwid

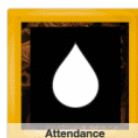


HP: 14 / 30 Mana: 3 / 40  
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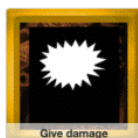
#### Powers - browse power trees



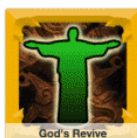
Give XP



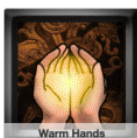
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**Chanter**  
Increases duration of Music and Favor of the Gods by 30 minutes.  
PASSIVE

Rune Cost: 1

**Composer**  
Mana cost of Music and Favor of the Gods is reduced by 5.  
PASSIVE

Rune Cost: 1

**Holy Sight**  
The whole team may watch videos in class for 30 minutes.  
Cost: 40 Mana  
200 Exp

Rune Cost: 3

**Scrying**  
The player may watch videos in class for 15 minutes..  
Cost: 15 Mana

Rune Cost: 2

**Music**  
The player may listen to music in class for 45 minutes.  
Cost: 10 Mana

Rune Cost: 1

**Clarivoyance**  
Increases duration of Scrying and Holy Sight by 5 minutes.  
PASSIVE

Rune Cost: 3

**Clarivoyance**  
Increases duration of Scrying and Holy Sight by 5 minutes.  
PASSIVE

Rune Cost: 2

**Favor of the Gods**  
The whole team may listen to music for 45 minutes.  
Cost: 30 Mana  
200 Exp

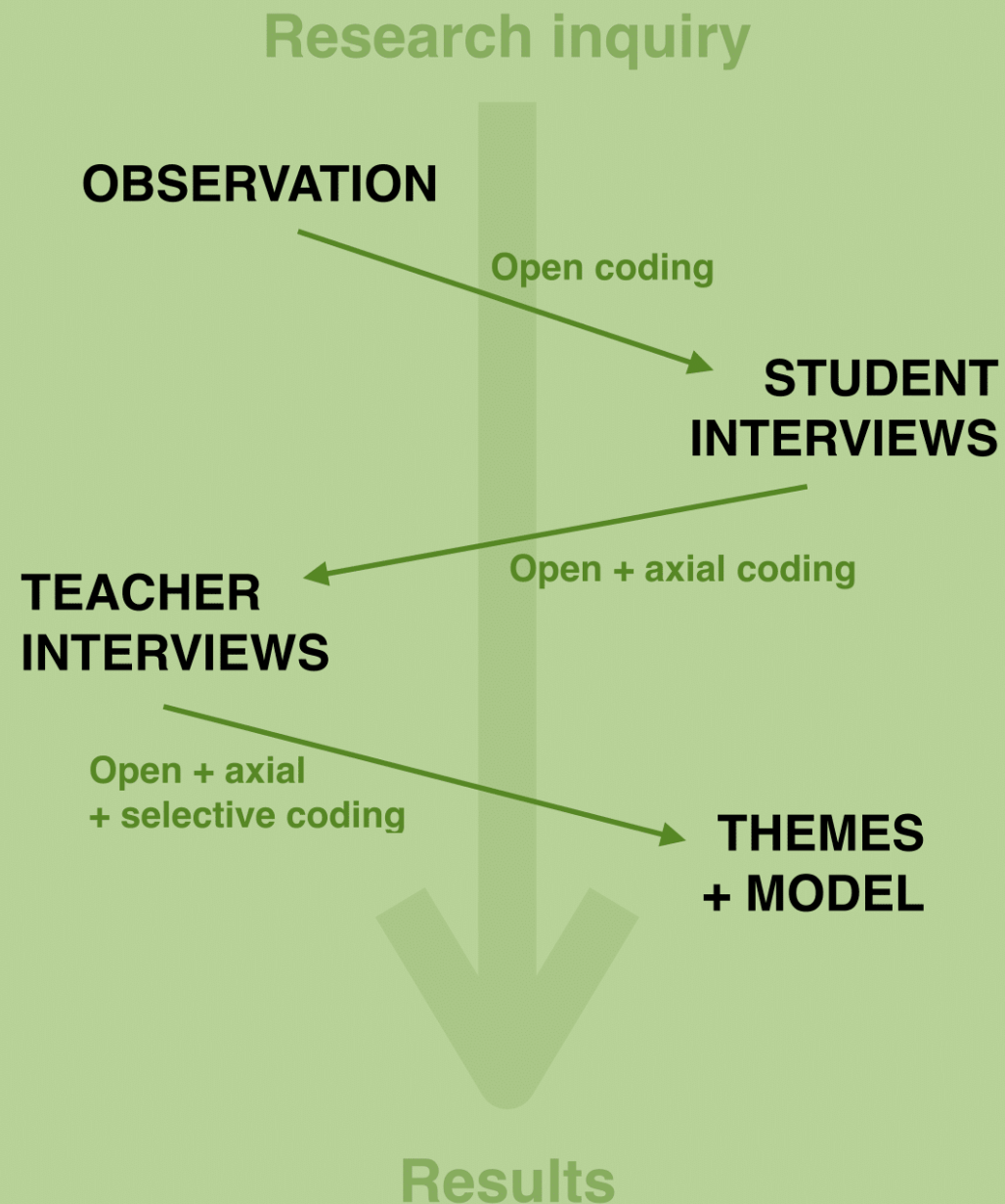
Rune Cost: 2

# HEIMDALL'S QUEST



# RESEARCH DESIGN

## The iterative research process



- ▶ Qualitative holistic case study on a gamified classroom
- ▶ Observation and interviews with 5 students and 2 teachers
- ▶ Grounded theory analysis in 3 iterations
  - ▶ Coding and categorization using NVivo

## Identity & Culture

Gaming culture

Why students enjoy  
games

Self-assessment

## Games & Learning

What students learn  
from games

How students learn

HQ, learning and  
games

## Motivation

Motivating  
gameplay

Extra push

Working hard

# THEMES

### **The students' position in society**

Gaming culture  
Self-perception  
Domesticating games

Society level

### **The gamified classroom**

Learning activities  
Utilizing skills and knowledge  
Role of teacher

Classroom level

### **The motivating gameplay**

Motivation and play  
Rules and freedoms  
Competition

Student level

# FEATURES OF A GAMIFIED LEARNING ENVIRONMENT



**Motivating gameplay**

**The gamified classroom**

**Position in society**

**Features of teaching activities**

Competitiveness  
Playfulness  
Utilizing skills and knowledge  
Being consistent

**Features of teaching values**

Acceptance of gaming as a culture  
Viewing gaming as valuable

**RECOMMENDATIONS**

# THANKS FOR LISTENING!

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**Questions welcome!**

## References

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Images: Mats and Tomas Berget

Graphics: Jason Ready and Madeleine Lorås