



GAMES FOR HEALTH EUROPE
2025

DISCLOSURE SLIDE

for presentations at the

GAMES FOR HEALTH EUROPE 2025 CONFERENCE

I herewith confirm that there is not any conflict of interest with the conference organization or any of its sponsors.

DESIGNING TOOLS FOR INTERDISCIPLINARY COLLABORATION: *FROM RESEARCH PROTOTYPE TO DIGITAL AND TANGIBLE BOARDGAME*

Dennis Arts

Games for Health Europe

1 april 2025

Introduction



The lack of physical activity and an increase in sedentary behavior poses far-reaching health risks in our society (Das & Horton, 2016)



Wearable technology is promising but insufficient in promoting sustainable physical activity (Hermsen et al, 2016; Shih et al, 2015)



Integrate technological aspects with individual, social and environmental aspects (Bauman et al, 2018; Michie et al, 2011)



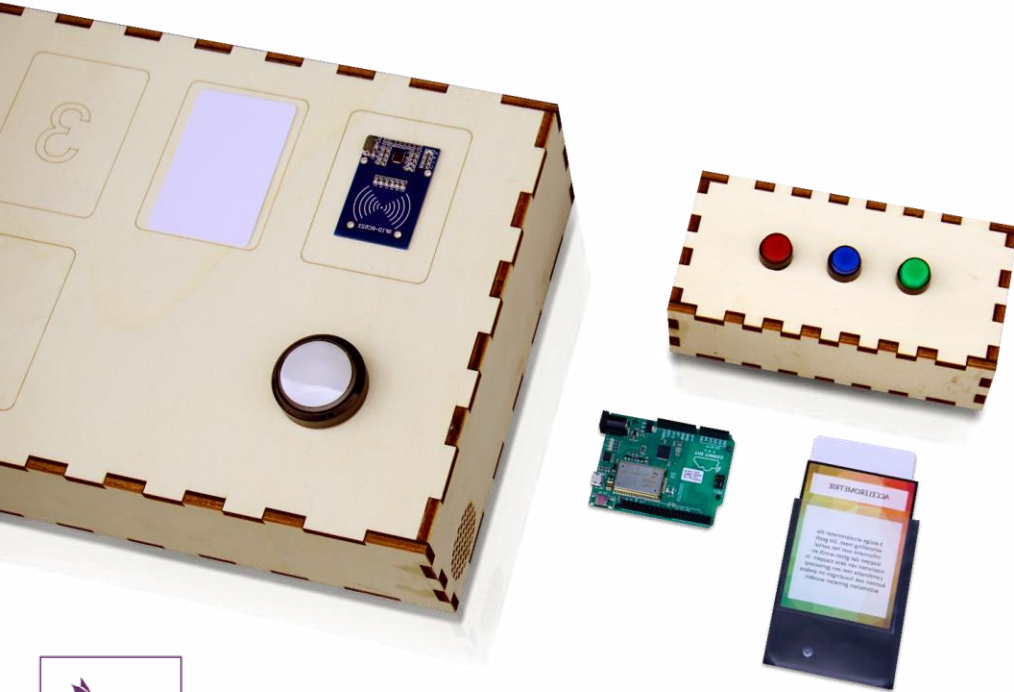
Participation and cooperation of individuals with different knowledge and expertise is required (Janssen et al, 2019; Moglen et al 2006)

Design of a board game

- Exploring (board) games as a learning tool
- Playing existing games (identifying mechanics)
- Developing and playing paper prototypes (lessons learned)
- COMMONS (research prototype)



Design of COMMONS



Exploring (board) games as a learning tool

Resulting in COMMONS, a research prototype

Works with voting boxes, RFID cards and a microcontroller for logging data

The main objective was to find out what would happen when a multidisciplinary team truly had to engage in dialogue to reach the most optimal solution.

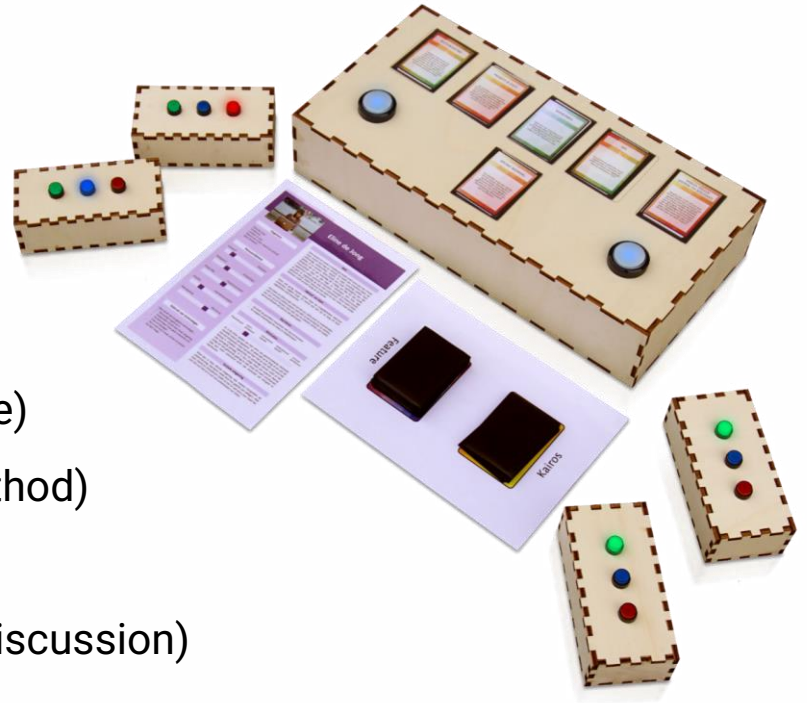
Rules

- The game requires four players (with different expertises).
- While playing a case study is central, accompanied by related statements.
- Players vote on statements to determine whether they believe these contribute effectively to solving the case.
- Players vote according the consent method: only when there's agreement there's a decision.
- The voting round has three outcomes: statement is accepted, rejected or there's no consent in which case the players enter a discussion round
- When a statement is accepted it is placed on the board. Players must agree on the position (1-5) of the card. If there's a discussion the overriding objections must be cleared. Players explain en discuss their arguments.
- At various moment players must resolve a intervention card, designed to disrupt and cause unpredictability. The only way players can deal with this is by working together.



Goals of COMMONS

1. Active involvement (facilitating choice)
2. Joint decision-making (consent method)
3. Prioritizing (placement on the board)
4. Exchange of viewpoints (through discussion)
5. Fun (Kairos)



Results

I could share my point of view

I was actively involved in the process

I could freely express my opinion

I have gained insight into the arguments of other players

I understand why other players consider other features important

We created a common language

We clarified concepts and definitions



How can we harness this potential?



Development high fidelity prototype



Key functions

1. **Familiarization:** developing a shared language and understanding each other's fields regarding a case.
2. **Discussion:** exploring perspectives and identifying personal expert opinions within the group regarding elements of the case.
3. **Prioritization:** deciding and prioritizing possible solutions for the case, within constraints of time and resources

COVID-19



Support focus groups in a virtual environment

Article
Co-Operative Design of a Coach Dashboard for Training Monitoring and Feedback

Joos Goudswaard ^{1,2,*}, Ruby T. A. Otter ^{3,4}, Inge Stoter ⁵, Berry van Holland ⁶, Stephan van der Zwaard ⁶,
Johan de Jong ^{1,7} and Steven Van ^{1,2}

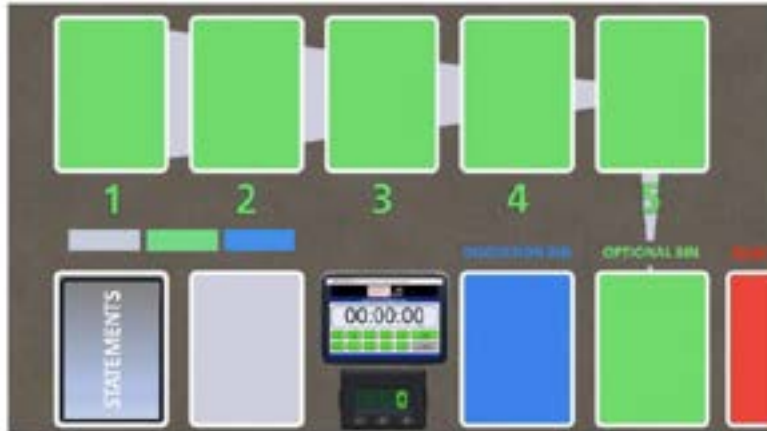
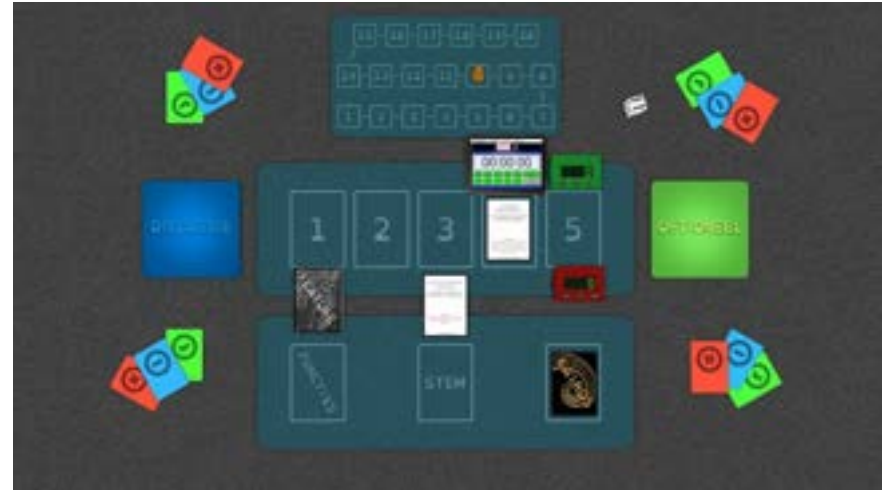


Figure A2. Visual of the digital COMMONS board, based on Arts et al. [28]. The green places at the top are the top-1 (highest prioritised statement) to top-5 (fifth prioritised statement) places, with the optional bin at the bottom. The red place is the rejected bin, which was only half-visible on the screen during the focus group as well. In the middle, a timer and counter are displayed. For every statement,



Fully functional online version

- Create your own account
- Enter your own case
- Create your own statements
- View results
- Fully privacy-proof
- For the Dutch: completely free of charge

www.commonsnu.nl



Tangible board game

The tangible board game COMMONS is produced and delivered by Wink Games in mid-December 2024.

As a conclusion of my PhD trajectory, I am evaluating COMMONS through interviews with experienced designers





**Would you like to participate
in the final study?**



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