

# Games for Good: Media Literacy and Digital Citizenship

Media and Learning, 11<sup>th</sup> Dec. 2024



**Professor Aphra Kerr**

**School of Information and Communication Studies**

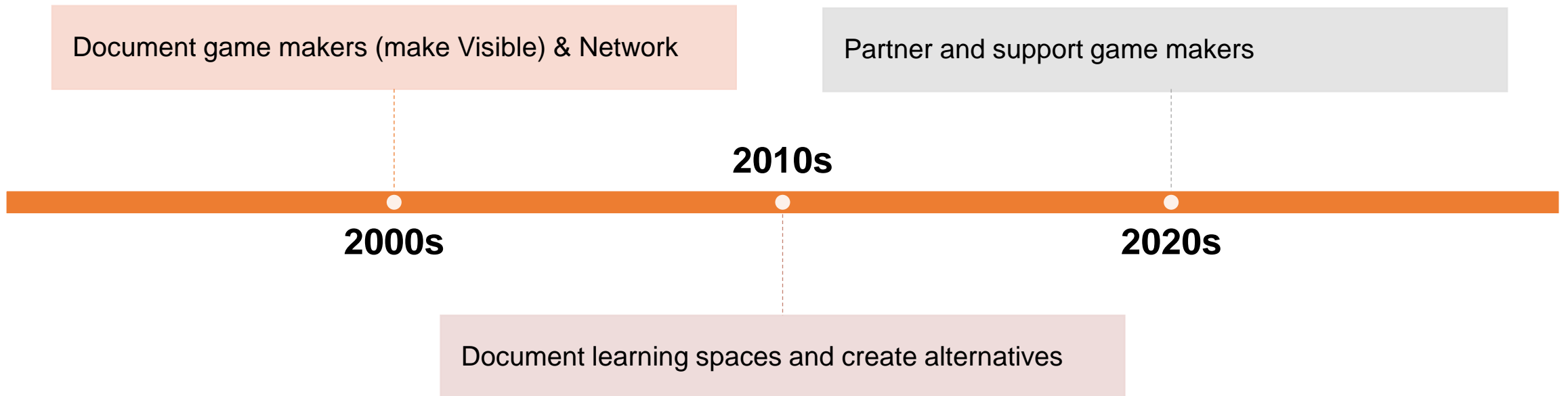
**University College Dublin and Algowatch project**

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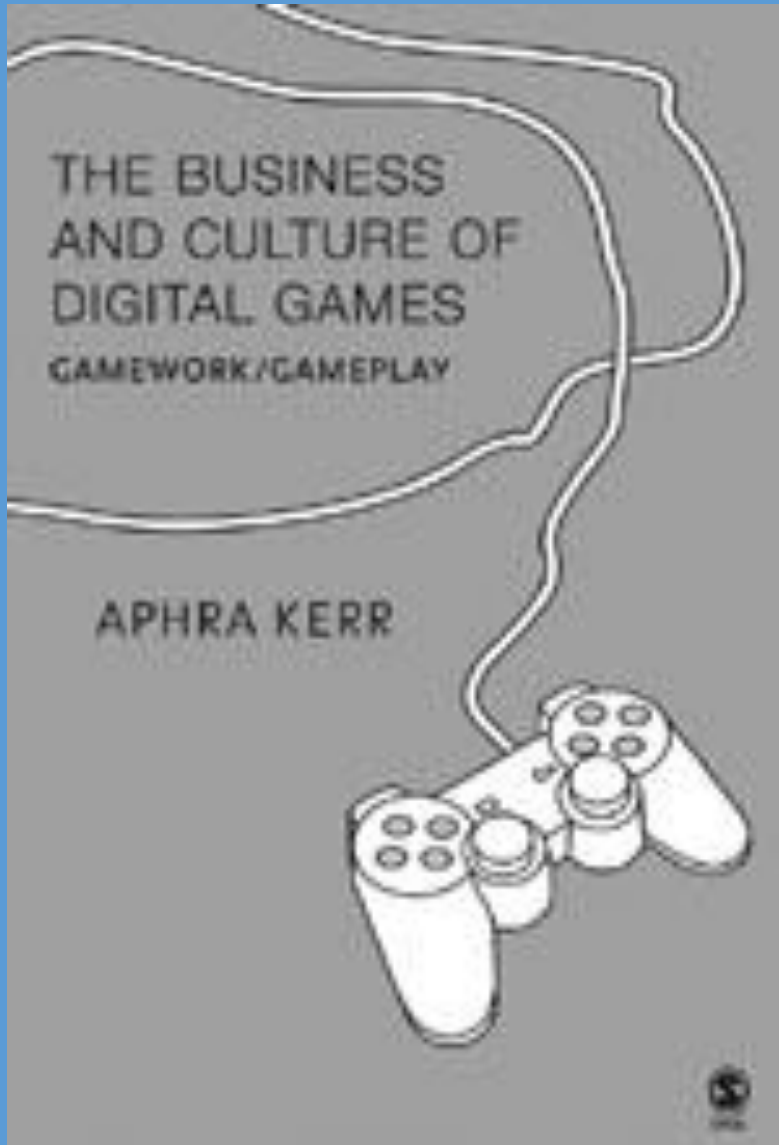
# Outline

- Background
- Games and Learning approaches
- Projects: ReFiG, Bias and Algowatch
- Algowatch Project Walkthrough

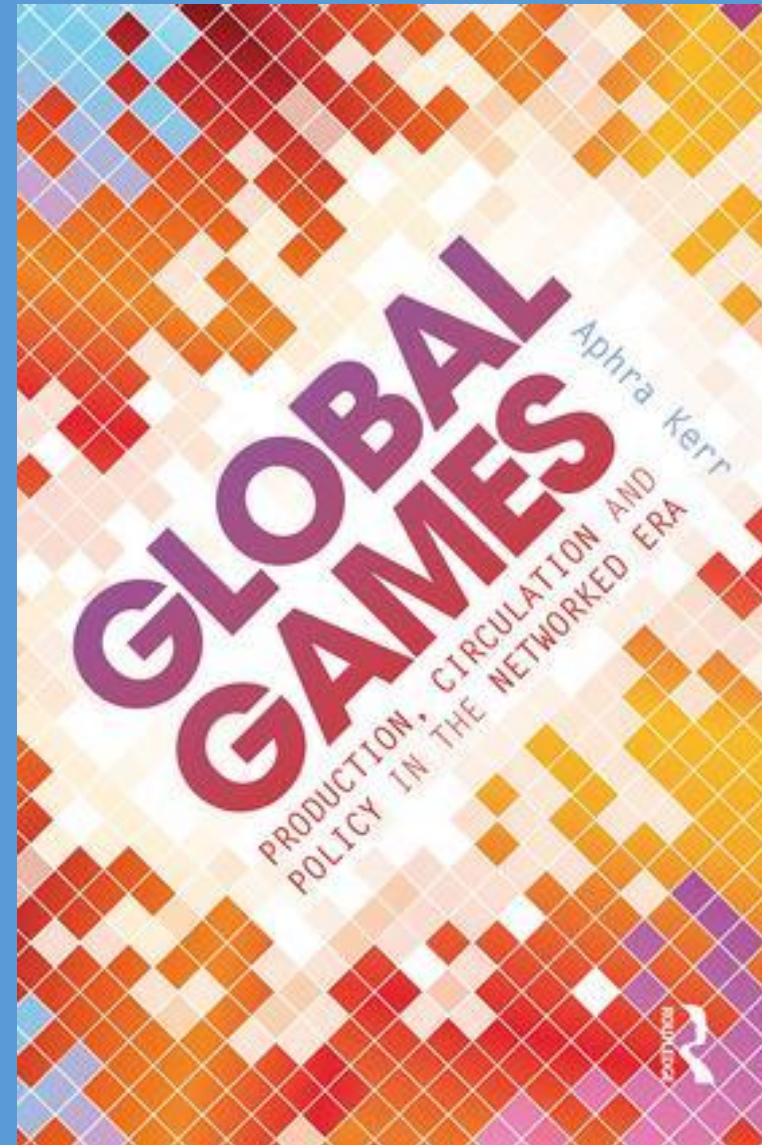
# 20 yrs + in games research

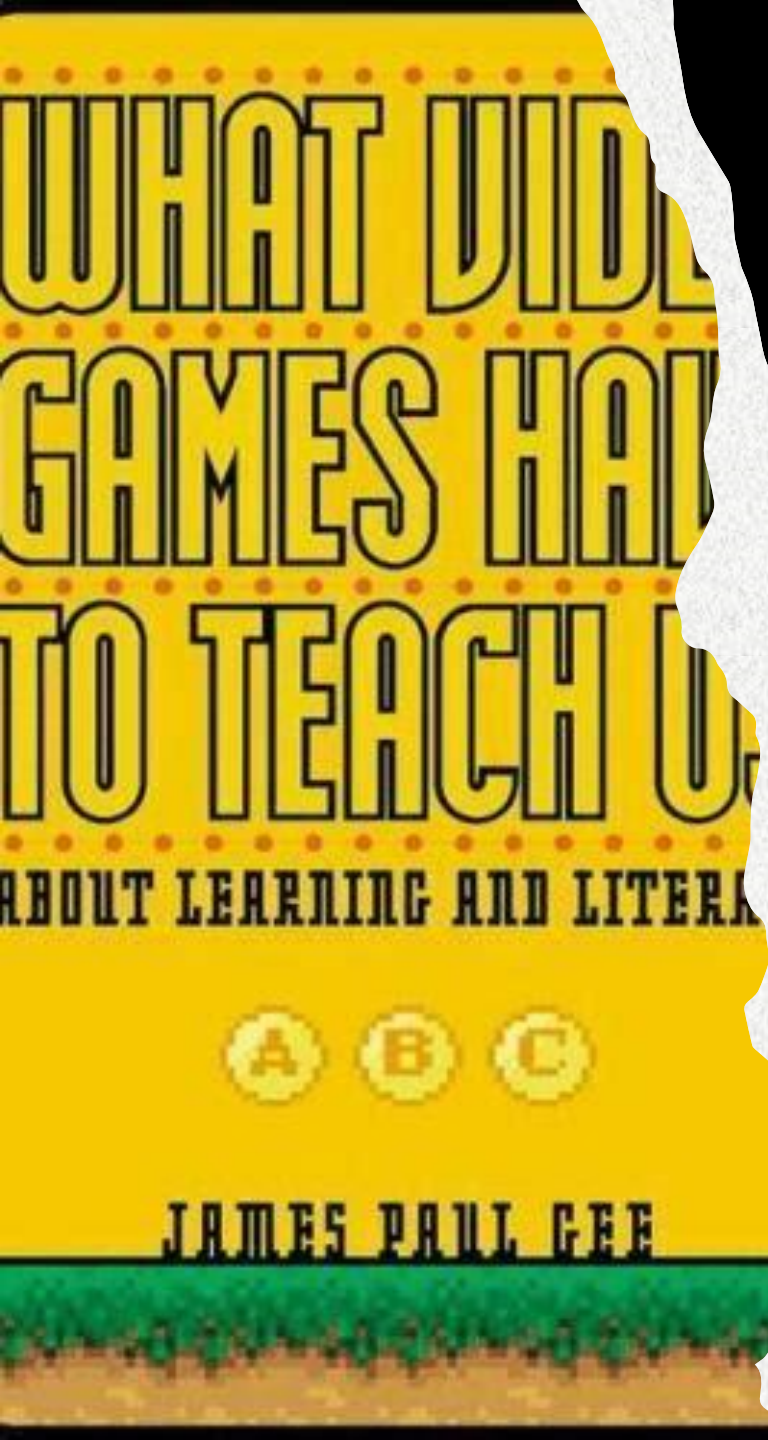


2006



2017





# Game Based Learning



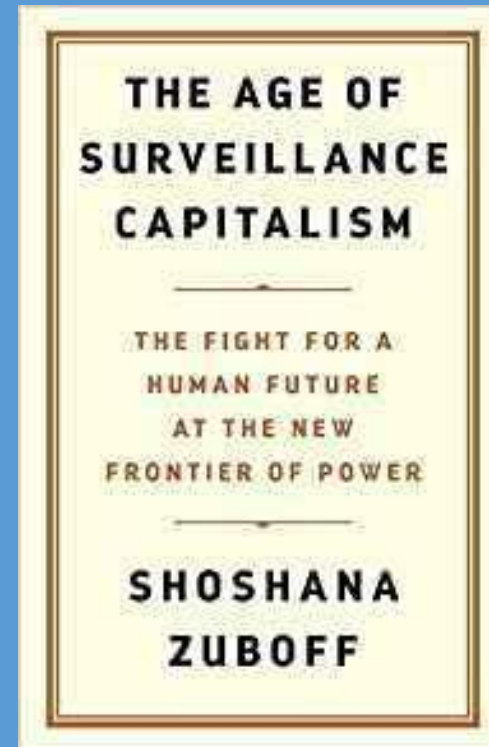
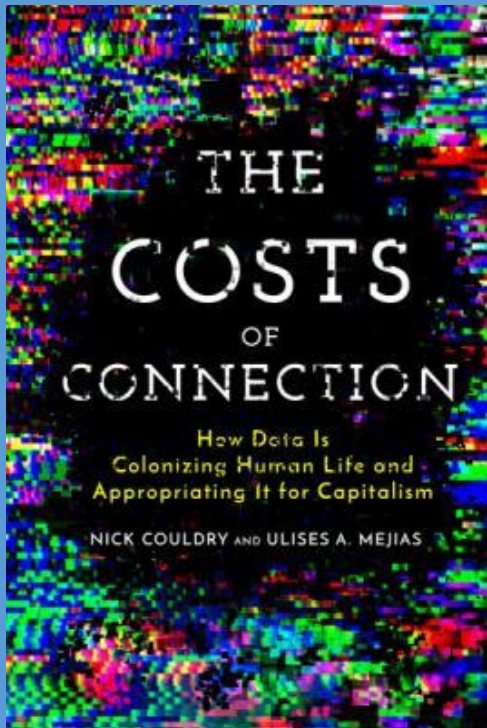
# Digital Games for Empowerment and Inclusion (2013)

## Meaningful or Applied Games.

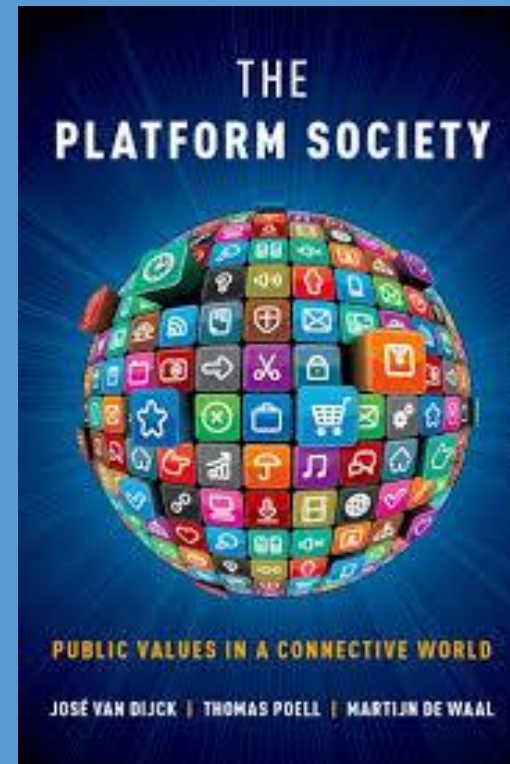
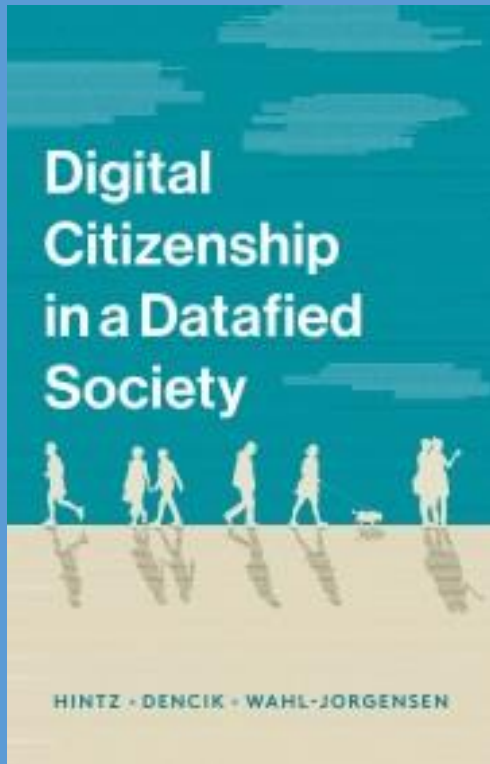
‘The use of game techniques, genres and technology to design tools and products used specifically for non-leisure ends, such as defence or education. Difficult to produce since it requires integration of expertise in **serious** application domain with expertise in producing 'good' games. Though hotly debated, there is widespread use of the term serious games and identification of a serious game market and industry.’ (pg 22)



# Data Colonialism or Surveillance Capitalism?

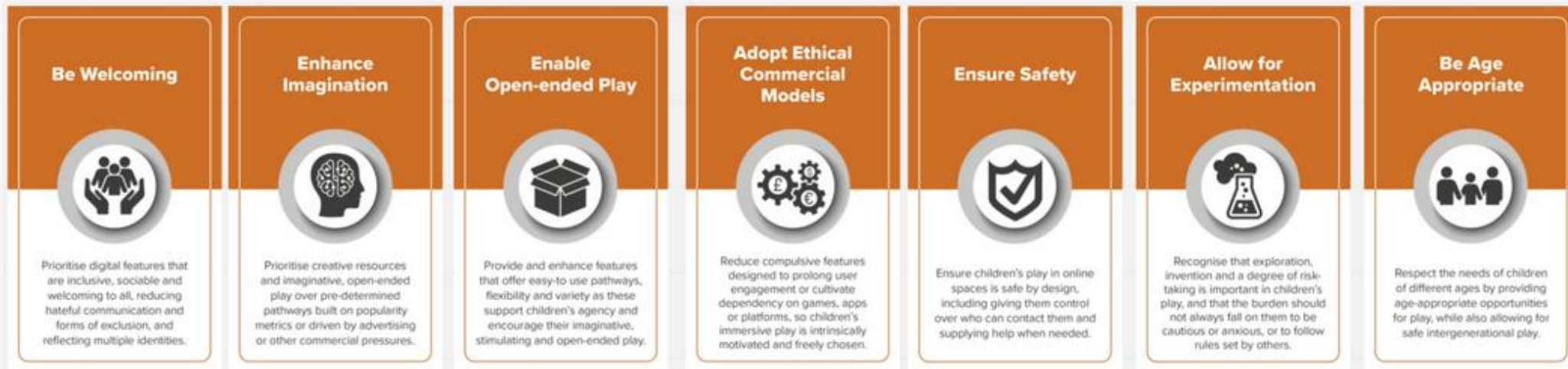


# Digital Inequalities and Public Values





# 7 Playful By Design Principles – Pothong, Livingston and Colvert



Each principle combines the digital features that should be dialled up or down to afford the qualities of free play that both children and experts value.

<https://digitalfuturescommission.org.uk/blog/realising-playful-by-design-in-practice/>

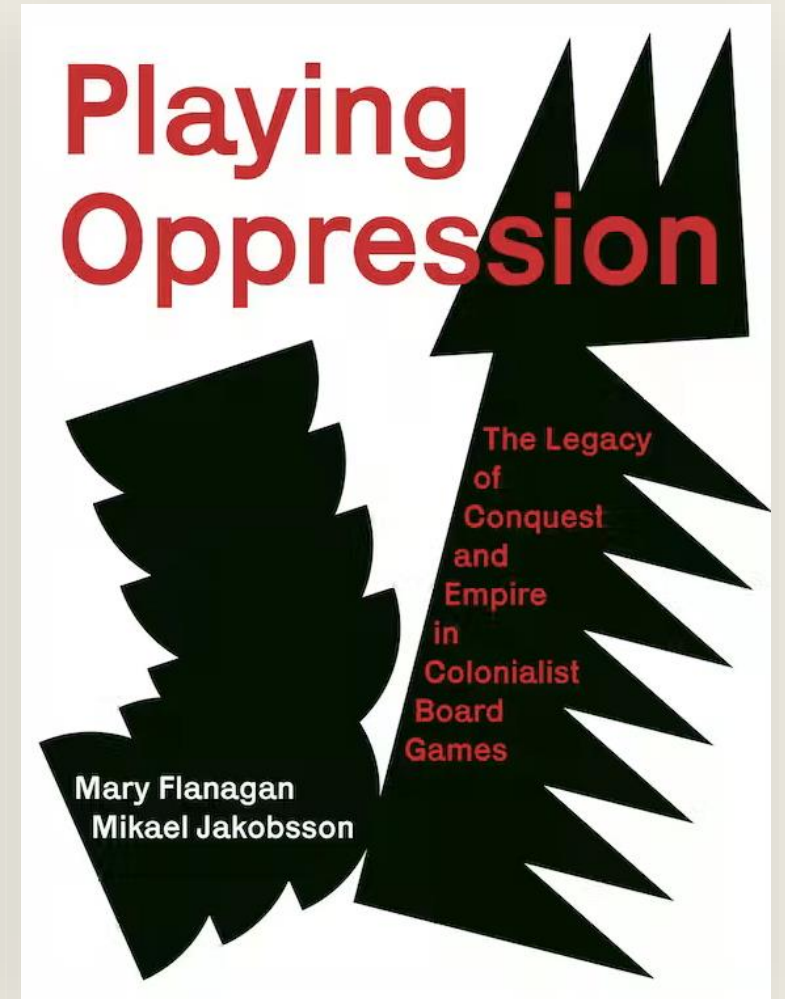
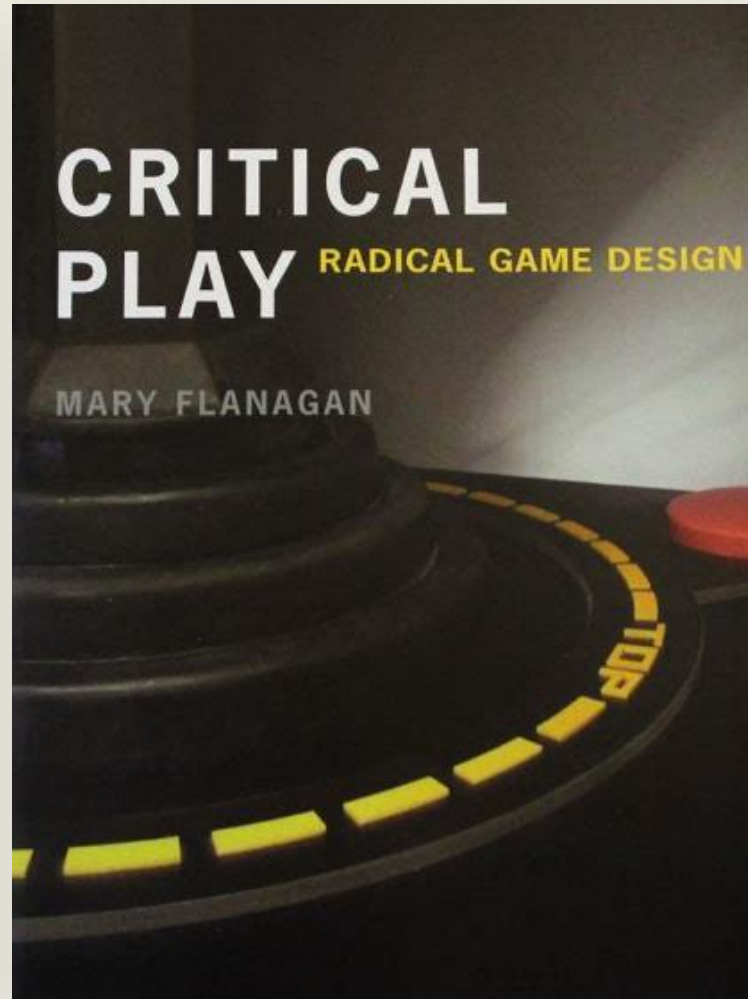
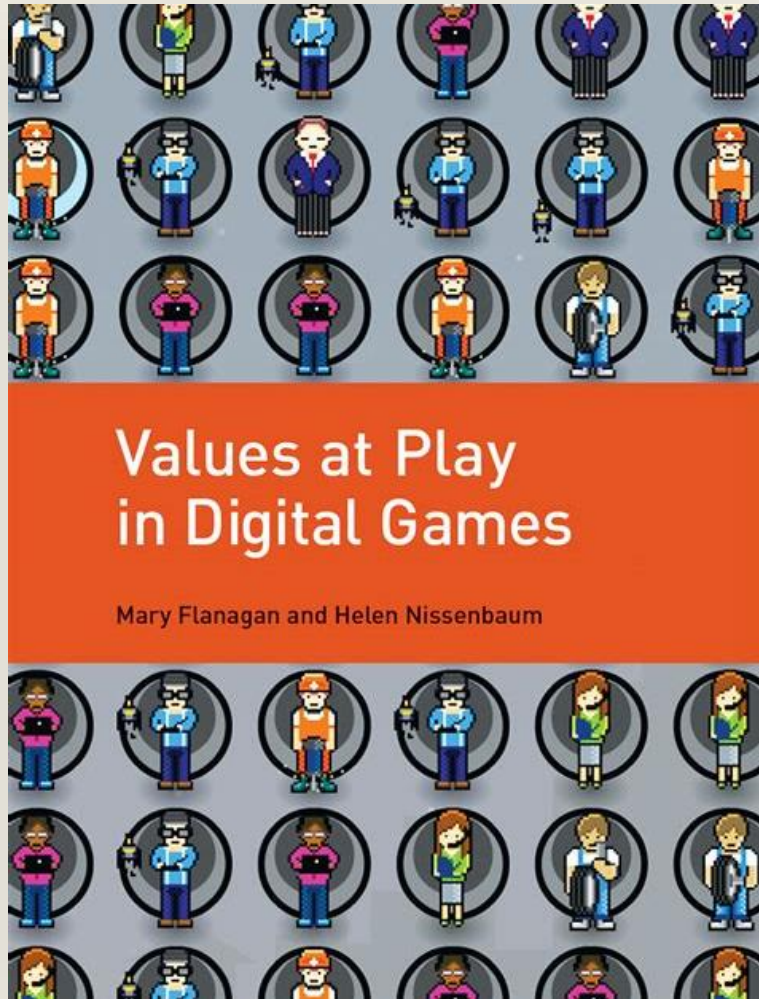
# Childrens Rights and Play



We should think of the Convention as a whole: each of the rights enshrined within it is interlinked, and no right is more important than another. The following **rights are of equal importance** to every child. **Every child has the right to:**

- **Relax and play** (Article 31)
- Freedom of **expression** (Article 13)
- **Be safe** from violence (Article 19)
- An **education** (Article 28)
- Protection of **identity** (Article 8)
- **Sufficient** standard of **living** (Article 27)
- **Know** their **rights** (Article 42)
- Health and **health services** (Article 24)

maryflanagan.com



# Train (2009)

brenda romero

[CORE](#) [WORK](#) [BIO & AWARDS](#) [LUDOGRAPHY](#) [SPEAKING](#) [CONTACT](#) [SHOP](#)

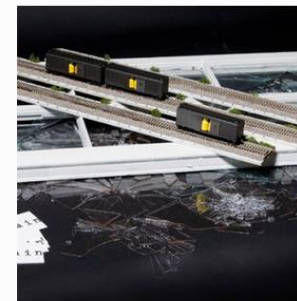
## TRAIN

Train is a critically acclaimed and award-winning game. Train explores complicity within systems. It also asks two questions, "Will people blindly follow the rules?" and "Will people stand by and watch?"

Game Designer: Brenda Romero

Release Date: April 29, 2009

- Design Confidante and Sounding Board: Ian Schreiber
- Testing: Christopher Schmidt, Michelle Menard, Laura Beukema, Ian Schreiber, Darren Malley, Tyler Hawley
- Thanks to: Ian Schreiber, John Sharp, Ian Bogost, John Romero, David Dirlam, Rabbi Belzer, Steve Meretzky, David Fox, Dan Cook, Jason Rohrer



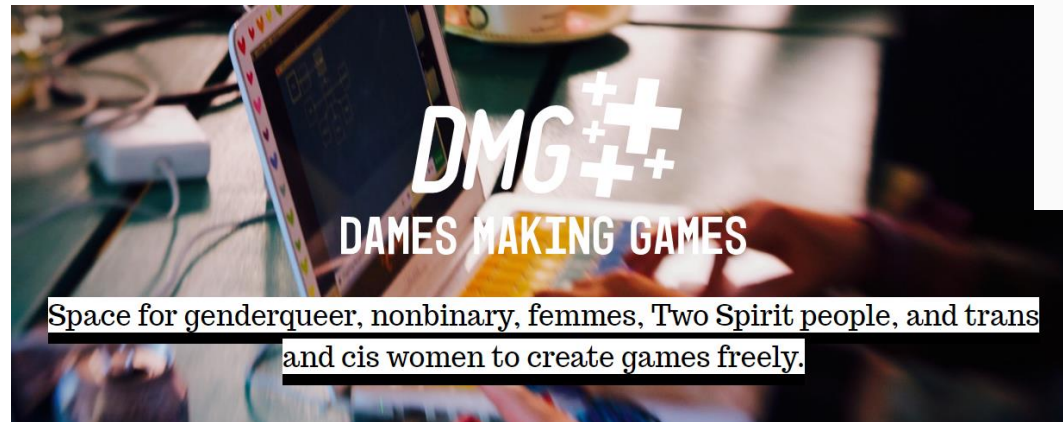
# Example 1: Creating more diverse game making cultures

WOMEN IN GAMES



about

AlterConf was a traveling conference series that provided safe opportunities for marginalized people and those who support them in the tech and gaming industries.



# Events and Awareness raising, Ireland



Women in the Irish Games industry event,  
International Women's Day, Dogpatch  
Labs, Dublin, March 2016



Family Unplugged Game design event,  
Inspirefest,  
July, 2016, & June 2017 Dublin.



# ReFiG research final report 2020



**DECODING & RECODING  
GAME-MAKING  
EVENTS**  
FOR DIVERSITY, INCLUSION  
& INNOVATION

Dr. Aphra Kerr, Joshua D. Savage & Vicky Twomey-Lee

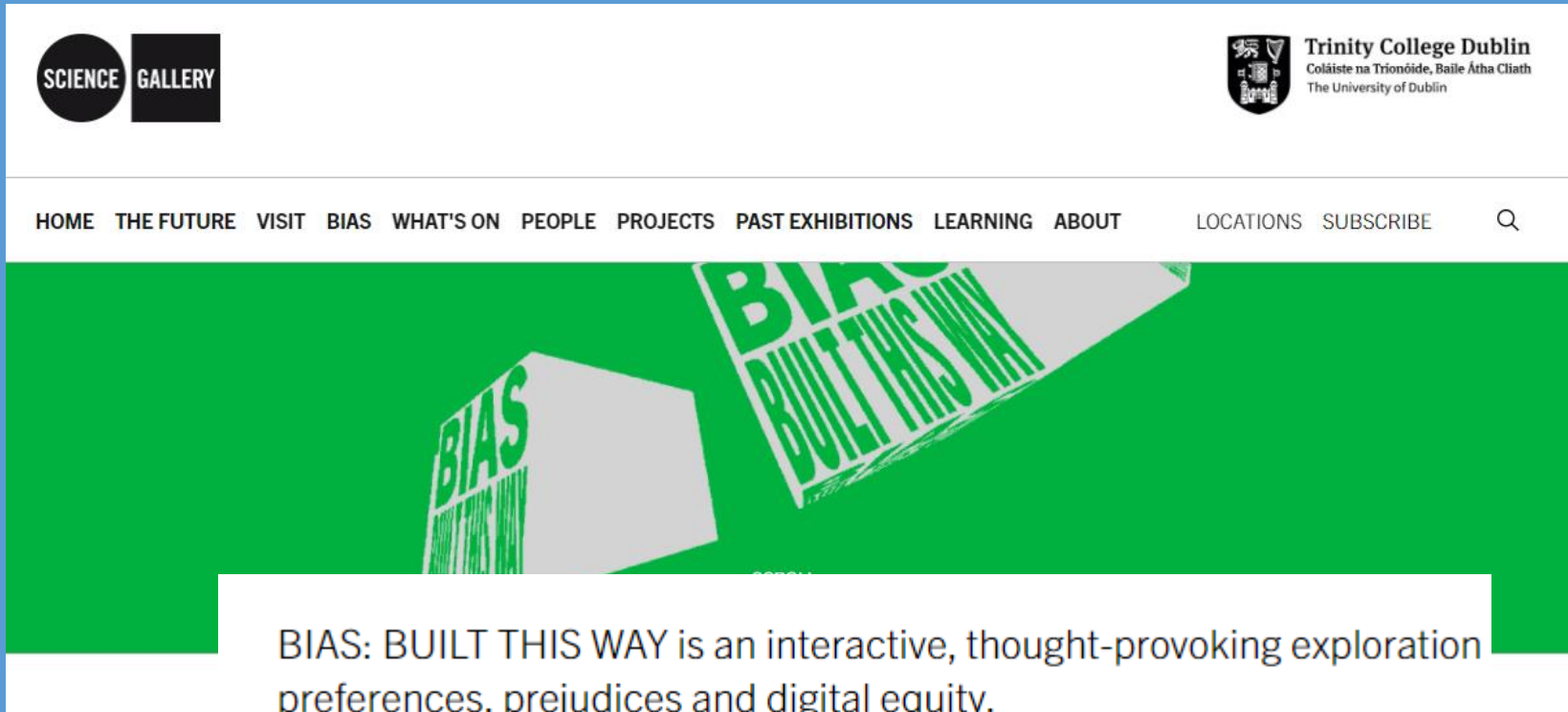
 Social Sciences and Humanities  
Research Council of Canada  Conseil de recherches en  
sciences humaines du Canada  Canada


Available from <https://mural.maynoothuniversity.ie/12575/>

# Example 2: Artistic collaborations

## Bias Exhibition – Science Gallery Dublin, 2021





# Flag for Removal, 2021.

## What's it like to be a human worker in a world designed for algorithms?

*Caroline Sindera, Aphra Kerr & Karl Hohn*

Social media companies process billions of posts on any given day. They use AI to automate the screening and moderation of this material, but still rely on human moderators to validate and ensure the accuracy of the algorithm. This approach seems to offer the best of both worlds - the speed of AI and the eye of context and meaning of a human - but what is the experience of the human worker in a system designed to function at the speed of AI? This interactive game draws attention to the high-pressure working environment many content moderators experience on the job.

*Commissioned by Science Gallery Dublin and created with ADAPT, the Science Foundation Ireland Research Centre for AI Driven Digital Content Technology.*

### ABOUT THE ARTISTS

Caroline Sindera is a machine-learning-design researcher and artist. Aphra Kerr is a Professor at the Department of Sociology at Maynooth University and a Co-PI at the ADAPT Centre for Digital Media Technology. She is the scientific lead of the Transparent Digital Governance strand. Research assistance was provided by Melina Garcia, Ciara Hogan and Joi Neuda. Karl Hohn is a developer, artist, musician, and educator based in Brooklyn. Special thanks to Anastasia Clarke for music and sound effects.





HOME PROJECT ▾ RESOURCES ▾ NEWS AND EVENTS

## Decoding Algorithms Media and AI Literacy for All

The European project Algowatch focuses on educating the general public about the challenges of algorithms and Artificial Intelligence (Algo- and AI-literacy) in the field of information and digital citizenship, and follows on from the previous European project CrossOver. It was awarded as part of the CREA-MIL strand of the European Commission's Creative Europe programme.

<https://algowatch.eu/>

# Algowatch.eu

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HOME PROJECT ▾ NEWS AND EVENTS

## Deco Medi for A

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Commissio

ALGOWATCH is a European funded project which started at the **end of 2023** and will run for **two years**.

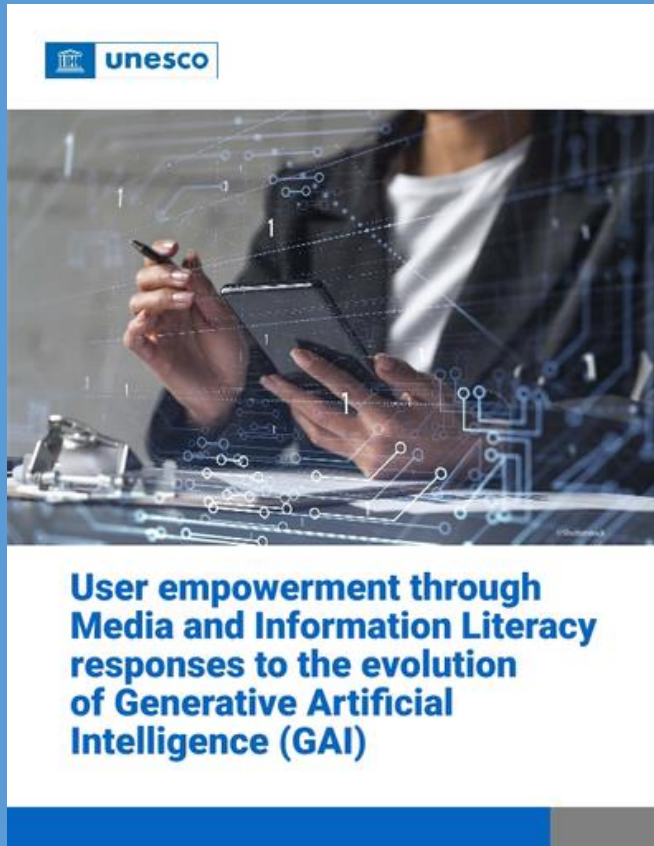
It aims to **improve literacy** about the influence of algorithms and Artificial Intelligence (Algo- and AI-literacy) in our everyday lives.

It will co-create, develop and adapt quizzes, games and an exhibition to work in different European contexts.



Partners – France, Ireland, Croatia, Portugal

# Evolving MIL competencies – Frau- Meigs, D. (2024a) UNESCO & (2024b)



**Production & Context**

**Knowledge**

**Skills**

**Attitudes**

**Values**

# Competence Framework on website



## OTHER RESOURCES

### Référentiel de compétences EMI en Algo-IA littératie

A partir de 13 ans et plus! Version 1.0 – Juin 2024 [DOWNLOAD](#) | PDF (295KB)

### MIL competence framework in Algo-AI literacy

From age 13 and more! Version 1.0 – June 2024 [DOWNLOAD](#) | PDF (295KB)

<https://algowatch.eu/resources/>



Algowatch presented at IAMCR in New Zealand

JULY 9, 2024



Project meeting in Lisbon

JUNE 5, 2024



Media and AI literacy is everyone's mission

MARCH 16, 2024

### FOLLOW US

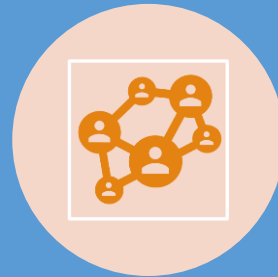


# Target Groups



## **1st Target group**

Youth (15+) in the schools and outside schools, as they represent the highest potential gains.



## **2nd Target group**

Mediators and replicators (including administrators in museums and youth organizations) to reach out to larger audience (adults, seniors, migrants).

# The MU team 2023 (according to GenAI)



Aphra



Emma



Jean



# Algorithms and AI Co-creation session



<https://algowatch.eu/>



Co-funded by  
the European Union

## Three co-creation sessions completed (IRL)

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1. **Dublin** - Educate Together, no religious ethos, mixed boys and girls school, capital city. (N=32, 15-17 years) 1 hour
2. **Maynooth** - Community School, multi-denominational, mixed boys and girls school, small town, (N=60, 15-16 years) 1 hour
3. **Portlaoise** - Youth Group, mixed, large town (N=8, 13-17 years) 1.5 hours

# 4 themes/stories in main game

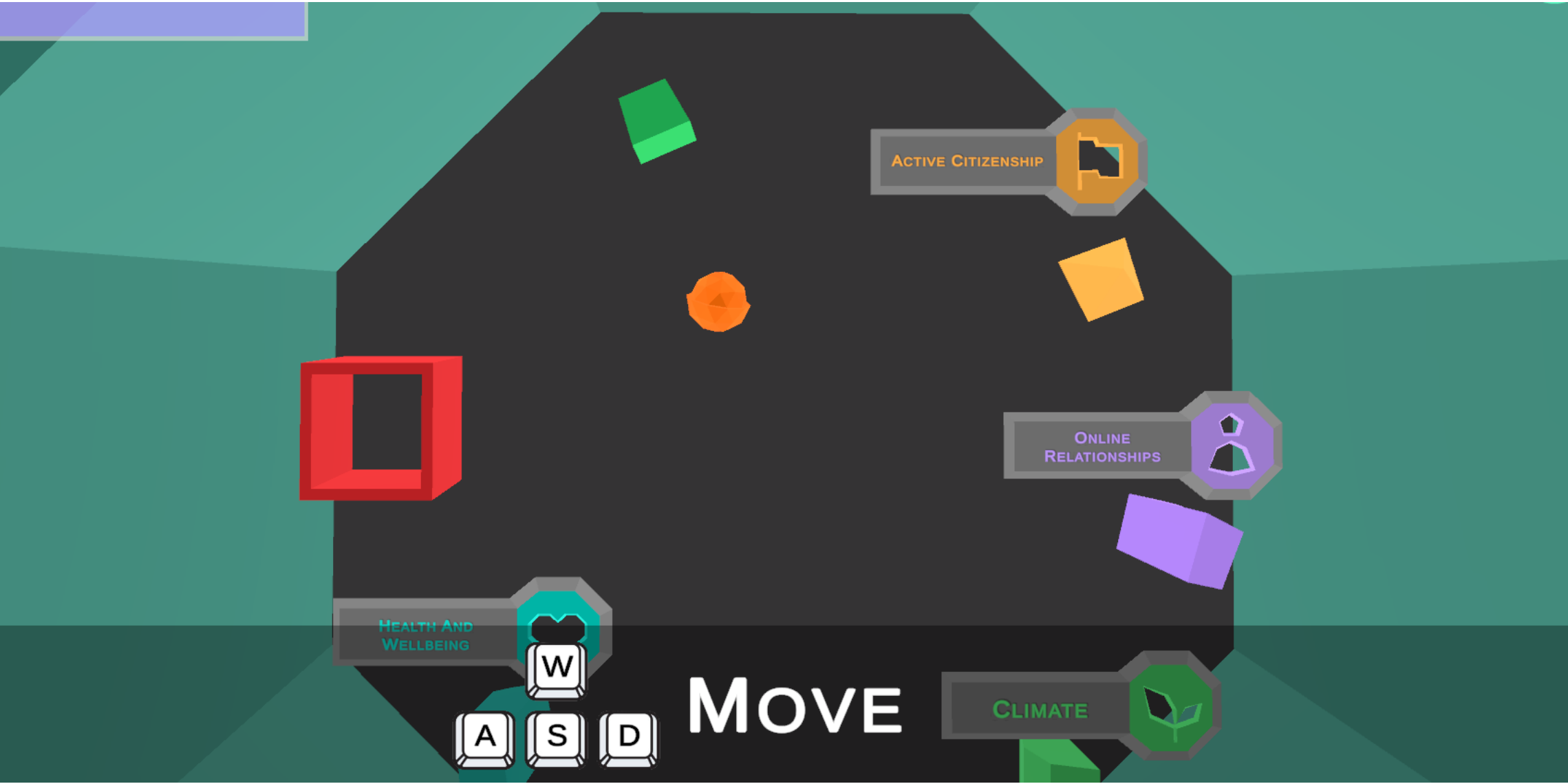
- Democracy and Citizenship
- Climate Change
- Health and Wellbeing
- **Online Relationships**

# Principles

- 1. Co-design with young people, age appropriate
- 2. No advertising or datafication
- 3. Access via browser, no installation
- 4. Open ended and self paced
- 5. Adventure, puzzles, rewards.
- 6. Attend to safety and data privacy
- 7. Playtest and iterate
- 8. Pre and post test, evaluate
- 9 Four languages
- 10 Resources for use in different contexts – social aspects of learning as well as individual/cognitive.

# ALGOWATCH





ACTIVE CITIZENSHIP



ONLINE RELATIONSHIPS



HEALTH AND WELLBEING



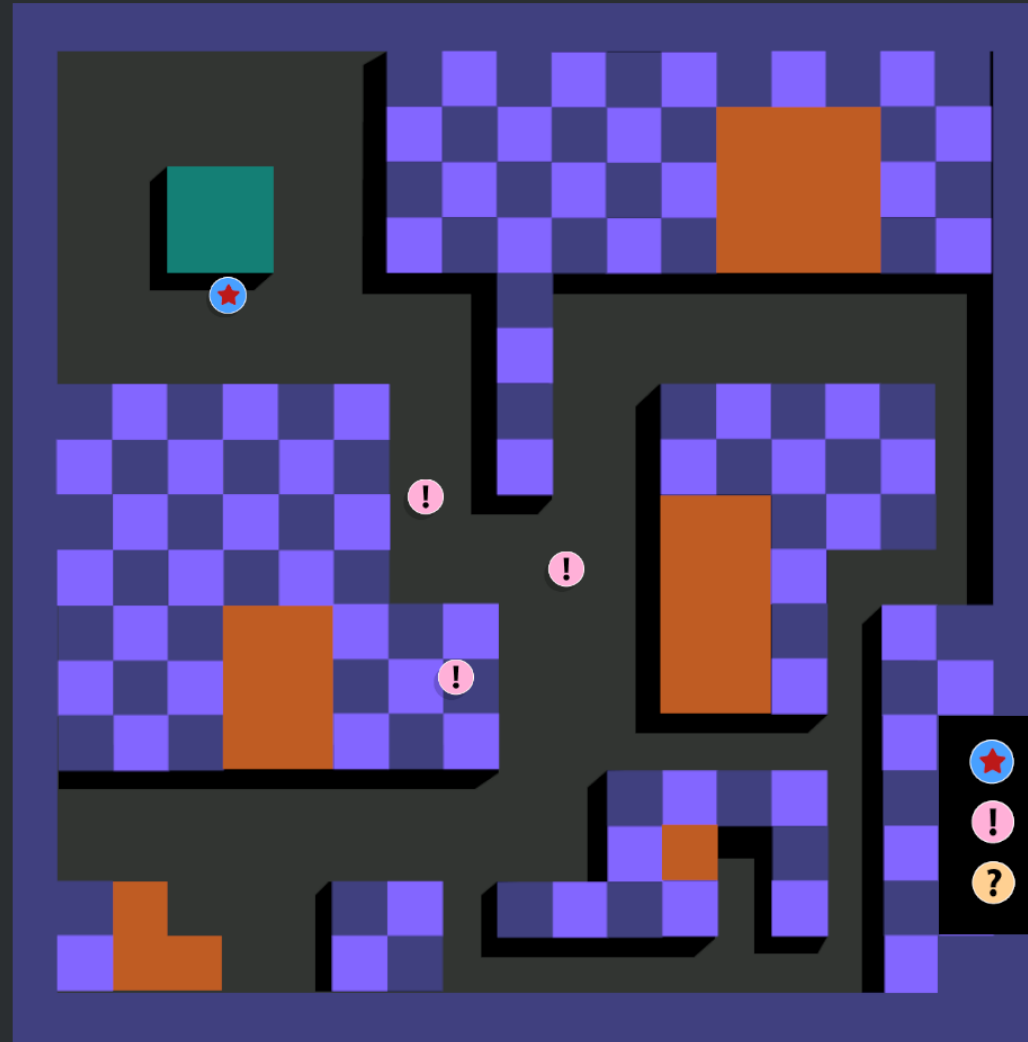
CLIMATE



MOVE



# MAP



-  JAFREN
-  RUMOUR
-  CLUE

# Minigame mode





# Next Steps - 2025

1. Testing and iterating - Dec./Jan.
2. Training - teachers, intermediaries - Feb and Voices, Zagreb
3. Evaluation - pre and post testing in schools - March
4. Exhibition - April

Thank you

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# Diversity in the Industry 2014

