Gaming & Geography (Education) - A multi-perspective approach to understanding the impacts of gaming on geography (education)

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Theory/empiricism: video games as a potential space for critical geographic learning

Relevance: Theoretical/practical relevance of methods and expertise for the use of video games as a geographical medium

Analysis of video games as a medium in geography education

Research process: Indications of potentials and deficits, ideas for didactic reconstruction

Research products

1

Qualitative Approach: Expert interviews, conducted 1-2 hour interviews with experts from education, journalism, and the video game industry (n=5) on reflexivity issues.

Strategies and concepts for addressing video games in geographic education: Design of an OER regarding Gaming & Sustainability & design of workshops for teachers

Design of a **model of reflexive spatial analysis** in video games (Morawski 2023, based on ideas of: Gryl 2012, Ash 2012, Schell 2012, Lux &Budke 2021, Applis 2022, Kanwischer 2014, Ash et al 2018 …)

2

Quantitative Approach: Survey of students (pupils) (n=721) on video game use and spatial perception and assessed influence.

Quantitative Approach: Survey of teachers' (n=411) perspective on students' (pupils') interests regarding video games and digital media (research seminars practical semester)

Strategies and concepts for addressing video games in geographic education: Design of an OER regarding Gaming & Sustainability& design of workshops for teachers

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3

Transfer to higher education

Research project seminar with master's students in teaching elementary school and geography at high schools and comprehensive schools: **Individual research projects** (n=20) and **master's theses** on the reflexivity of the geographic medium of video games. (Cooperation with UBISoft)

Conducting an **exploratory case study** with two classes and 53 students (pupils) on reflective competencies and emotional experience through digital spaces in video games.

Transfer to schools

Transfer of research: improvement of the model, development of workshops and OERs for teacher professionalization, development of teaching materials and methods, publication of the Springer volume.
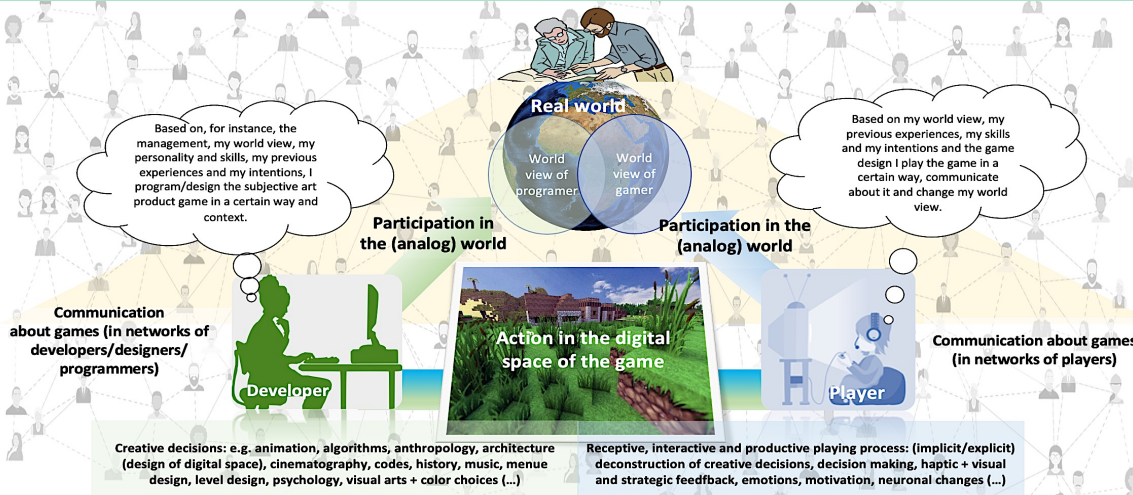
Contact

Trailer for the research project available:

Model of reflexive spatial analysis in video games:

(Morawski 2023, based on ideas of: Gryl 2012, Ash 2012, Schell 2012, Lux & Budke 2021, Applis 2022, Kanwischer 2014, Ash et al 2018 …)

Based on, for instance, the management, my world view, my personality and skills, my previous experiences and my intentions, I program/design the subjective art product game in a certain way and context.

Real world

World view of programer

World view of gamer

Based on my world view, my previous experiences, my skills and my intentions and the game design I play the game in a certain way, communicate about it and change my world view.

Participation in the (analog) world

Participation in the (analog) world

Communication about games (in networks of developers/designers/ programmers)

Action in the digital space of the game

Communication about games (in networks of players)

Developer

Player

Creative decisions: e.g. animation, algorithms, anthropology, architecture (design of digital space), cinematography, codes, history, music, menue design, level design, psychology, visual arts + color choices (…)

Receptive, interactive and productive playing process: (implicit/explicit) deconstruction of creative decisions, decision making, haptic + visual and strategic feedfback, emotions, motivation, neuronal changes (…)

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