

Computer games, learning and gameplay : Far from game over...

Ca. 225 pages

Introduction (ca. 15 p.)

Games – an old habit

Games, evolution, learning and socialization

Interview with a game designer about the challenges of learning in games

The research into learning, games and media (learning in cartoons, magazines, tv etc.)

Formulating and stating the problem

PART I: A research overview (ca. 30 p.)

Computer games in historical perspective

A short historical overview of computer games

The history of learning in computer games (games, companies, people, significant events)

The myth of computer game's learning potential

The current state of game-research

The research into learning and computer games

The instructional research paradigm

The simulation research paradigm (Simcity, civilization, , business simulations etc.)

The Bandura inspired research paradigm

The healthy way: foodman, Bronkie and other

The legacy of edutainment

The twitch speed paradigm: make it go away

Part I conclusion

PART II: The buildings blocks (ca. 75 p.)

Computer games and genre

A word on the computer as a genre, with games being a special genre

The four genres: Action, adventure, strategy and simulation.

The difference between genre and content variances

The hybrids have arrived: the advantages of combining genres

Building a new genre for learning games on the ruins of edutainment

Gameplay: a magic wand

Gameplay with a view

Gameplay from a design perspective

Gameplay from a player perspective

Gameplay from an academic perspective

Gameplay from a constructivist perspective

Gameplay from an action theory perspective

The practical barriers of computer games and learning

The designers discourse:

Setting the scene: who are we – game designer or teacher?

Collecting data for the game world – digesting materiale.

Gameplay modifications- walking a fine line.

The producers discourse: The special characteristics of learning games

Learning theories now and then

Konstruktivism

Konstruktivism

Bateson

Kolb

Hermansen

Cognitive theory

Etc.

The skisma between games and learning

The conflict of computer games, learning and gameplay

The importance of genre and the affordances in media, games and computer games

The structural expectations

The navigational expectations

The visual expectations

The graphical expectations

The narrative expectations

The action expectations

The affective expectations (it must be fun)

Locus of control – the perceived freedom of games

The cognitive stimulation – beyond audiovisual?

Layered versus branching approach

Taking the journey from learning to game perspective without forgetting one of them

A first sketch for a theory on games and learning

The basic elements of the model

A working model for experimentation

Part II conclusion

PART III: A Theory on learning in games (ca. 75 p.)

Testing aspects of the working model in an empirical setting

Methodology, set-up, preparation

The impact of instruction on gameplay and learning outcome

The perception and construction of objects in the game world

The transfer of knowledge between virtual game world and real life.

Building a game prototype for the model

Surveying the opportunities: Action, adventure, simulation, strategy or hybrid game

Design considerations

Debrief and discussion: What problems did the prototype run into

Building a theory about learning in (computer) games

Meaning as the constitution of knowledge seen through Bruner, Vygotsky and Werstch

Cognitive science on concepts and schemata

The social dynamics of learning exemplified through online gaming

The building blocks: data, information and knowledge

The narrative discussion: a omnipotent term

The ludology approach: back to basics

The implications of a virtual learning space – is it really different?

A theory about learning in (computer) games: Putting it all together

Genre bounds and limitations of the model

The problems of the theory

Part III conclusion

Part IV: Discussion - The problems of claiming computer games for learning (ca. 25 p.)

Epilogue (ca. 5 p.)