

# Virtual Game Method in Higher Education

## Students as Digital Natives – – Practical Perspective

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# What is the significance of electronic games in the learning process?



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# Attributes of games

1. Games as a form of fun and a form of play
2. Games have rules
3. Games have goals and win states
4. Games have outcomes and feedback
5. Games are adaptive
6. Games are interactive and have interaction
7. Games have conflict/competition/challenge/opposition and problem solving
8. Games are representations and story driven

M. Prensky (2007)



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What are the educational benefits  
of virtual gaming in higher  
education?

# Educational benefits of virtual gaming in HE

- acquiring knowledge in an alternative way, structuring and organising it
- testing/checking the knowledge and skills
- simulating authentic phenomena and processes
- development of the imagination to better understand and remember information
- integrating knowledge from different fields
- acquiring experience
- anticipating, forecasting and planning
- analysing, drawing conclusions, discussing the results



# Educational benefits of virtual gaming in HE

- reflective thinking, searching for relationships
- decision-making
- taking responsibility
- being creative
- problem solving skills
- creating interpersonal relations
- being cooperative
- being communicative (negotiation, conflict resolution, assertiveness)
- practising various professional roles (leadership)
- ....



# Who are virtual games users?



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# Big five personality traits

Trait	Description
Extraversion	Outgoing, talkative, sociable, enjoys being in social situations
Agreeableness	Kind, tolerant, sensitive, trusting, warm
Openness	Curious, original, creative, open to new ideas
Conscientiousness	Organised, systematic, punctual, achievement oriented, dependable
Neuroticism	Anxious, irritable, temperamental, and moody



# Games users categorization

- Achievers
- Killers
- Socializers
- Explorers



# Achievers

- Focus mostly on ratings
- Expect to be rewarded for each achievement
- Need extra gifts, additional bonuses
- Like game to be divided into parts, each stage needs to be accomplished to upgrade to the next level
- Are very competitive people
- Need challenges, comparing and winning



# Killers

- Drive their actions by negative emotions
- Do not think about ratings and the score
- Like destruction motives
- Want to take illegal actions against other users such as bribe, fraud or mobbing
- Want to destroy the game as the goal itself
- Want to have a strong impact on the game plot and its market
- May take some actions against the other players/users



# Socializers

- Create relation within the game
- Enjoy meeting people in the virtual environment as well as to postpone relations to the real life
- Cooperate with the other people or enterprises
- Need list of friends and chat as platform for brain-storming
- Prefer working in a group rather than take individual responsibility for their own decisions
- Have a positive attitude to others and are willing to help them in each situation
- Appreciate the way the goal has been achieved than the winning as the goal itself



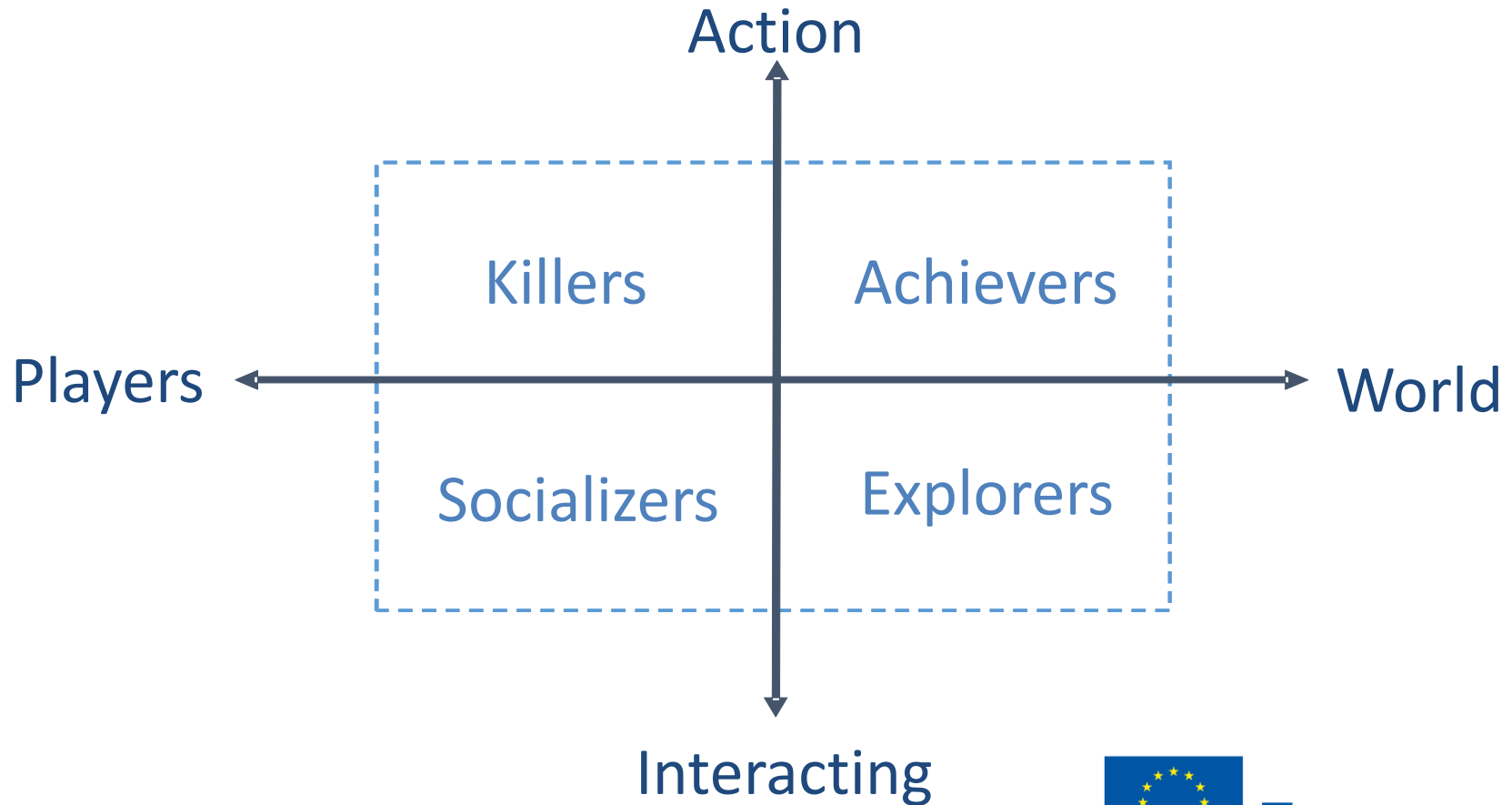
# Explorers

- The most demanding group of players
- The aim of the game is to increase the knowledge they possessed
- They are searching for some hidden options that have to be found to be explored
- Game as an adventure
- They need to search for additional options which are locked till the previous task is not done
- They expect every form of possible achievement, they like tests and exams
- They like if the game gives the possibility of self-development and possibility to gain new knowledge or skills














# Games users categorization

(M. Schacht and S. Schacht 2012)



# Importance of different factors in response to user type (Nowacki, Ryfa 2015)

	Points	Competition	Friend - making	Hostile behaviour	Knowledge increase
Achievers					
Killers					
Socializers					
Explorers					



# Killers

**Defined by:**

A focus on winning, rank, and direct peer-to-peer competition.

**Engaged by:**

Leaderboards, Ranks



# Achievers

**Defined by:**

A focus on attaining status and achieving preset goals quickly and/or completely.

**Engaged by:**

Achievements



# Socialites

**Defined by:**

A focus on socializing and a drive to develop a network of friends and contacts.

**Engaged by:**

Newsfeeds, Friends Lists, Chat



# Explorers

**Defined by:**

A focus on exploring and a drive to discover the unknown.

**Engaged by:**

Obfuscated Achievements





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