

Deliberate Play: Practical Application of Game Design for Learning



atd 21



Clappers wanted!



Song: “Happy birthday to you”

(for the name, use your own firstname)



atd 21



Deliberate Play

by Zsolt Olah

Learner's Choice

The most engaging and
effective learning experience
ever to gain the skill!



The skill.



9 Game Taxonomy Categories



9 Game Taxonomy Categories

Any human-to-human contact involved in the game.



Human Interaction



Rules & Goals

Rules, goals, and information that enable players to progress and reach goals.



Representation of the physical surroundings in which the player is immersed, also known as the game world.

Environment

The nature of the game world and story.



Game Fiction



The player's perceptual and affective relationship with the game fiction.

Immersion

Both the presentation of problems in a game as well as the nature and difficulty of such problems.



Conflict & Change

Specific communication rules of the game between the player and the system.



Action Language



Assessment

The nature and content of any feedback, such as debriefings, given to the player during the game.



Control

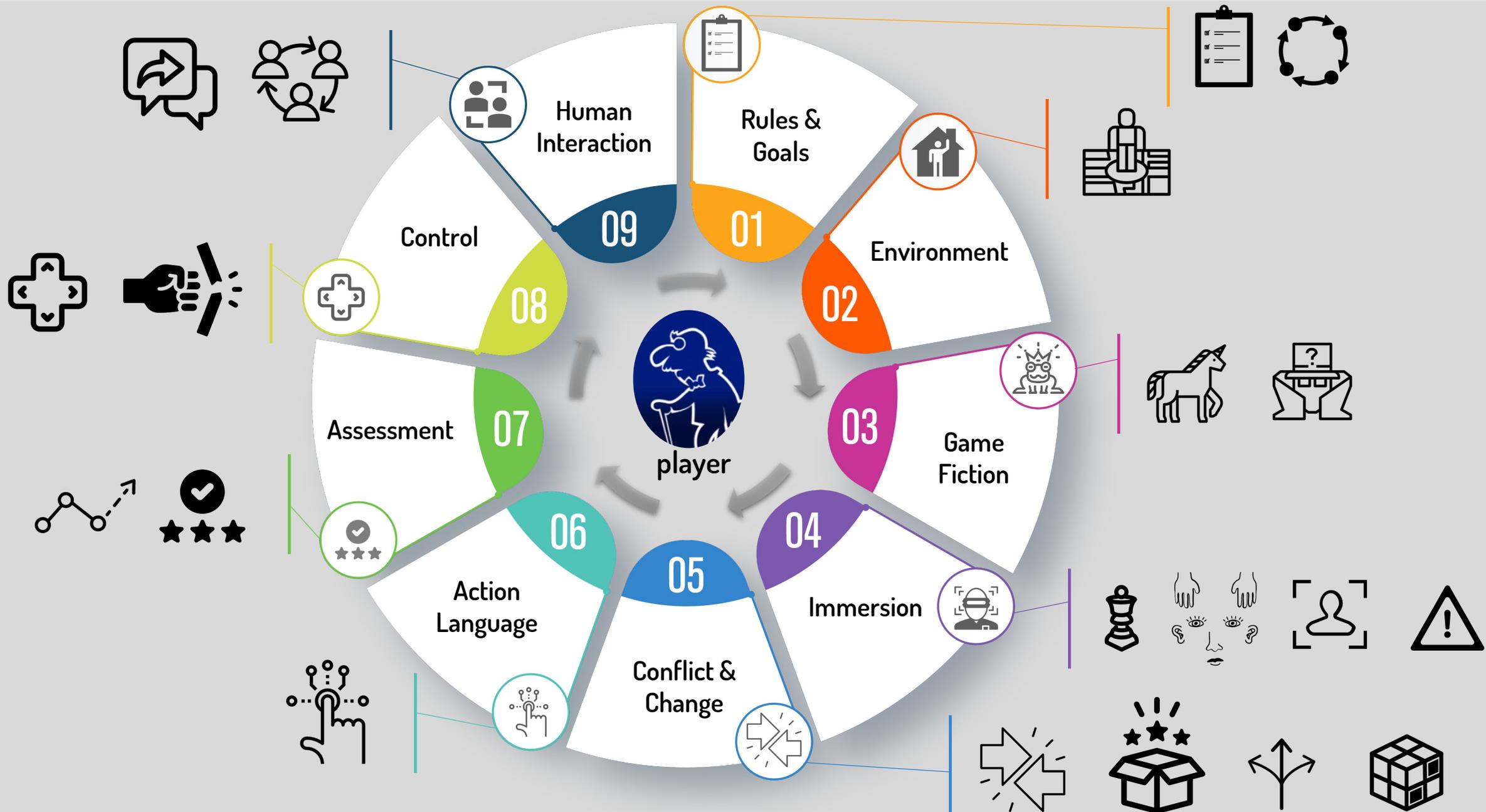
The degree of interaction and agency the player is capable of in the game.



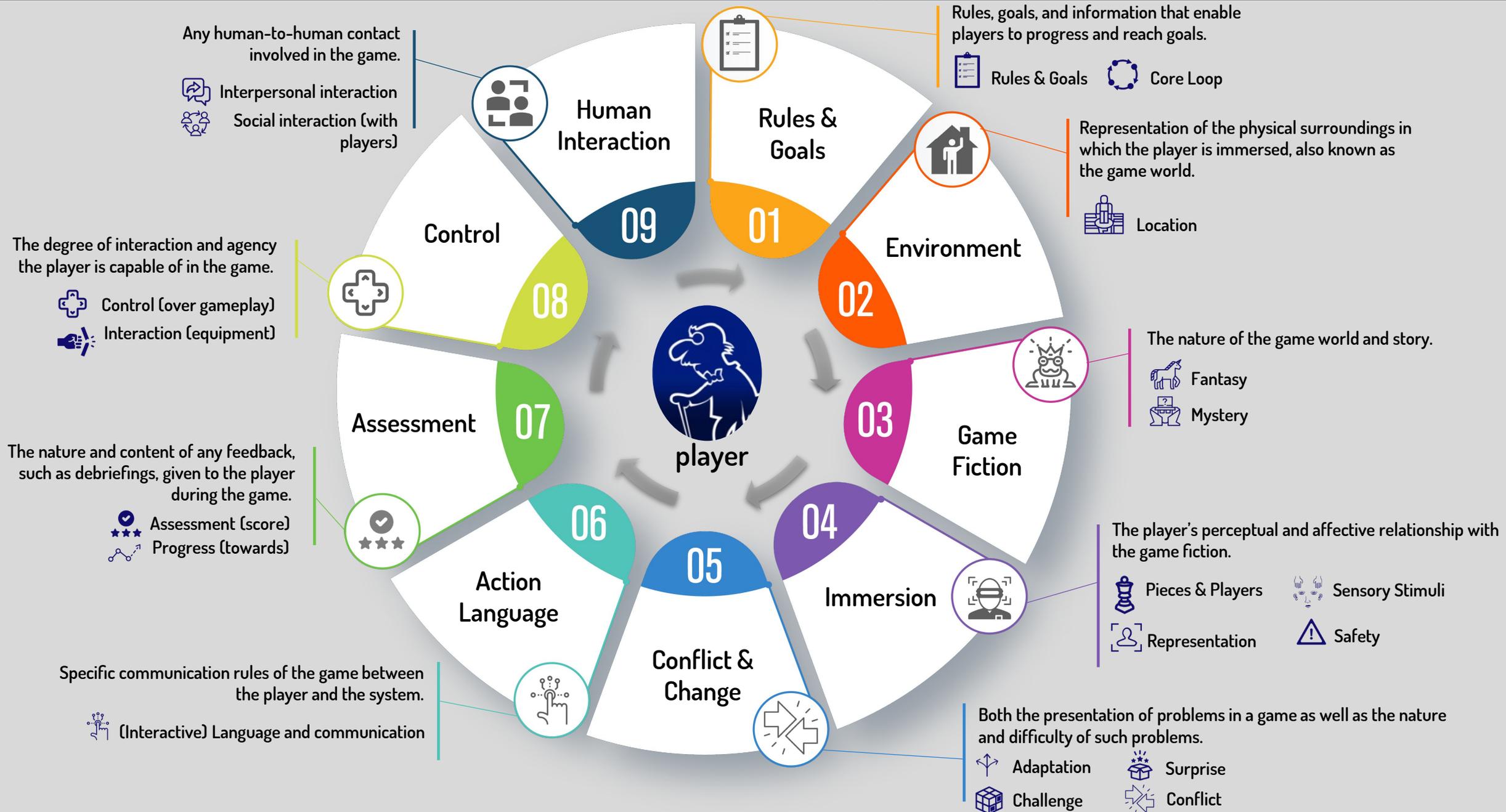
Human Interaction



9 Game Taxonomy Categories & Attributes



9 Game Taxonomy Categories



9 Game Taxonomy Categories



Rules, goals, and information that enable players to progress and reach goals.

Rules & Goals Core Loop

- What is the goal of the game? Does the game explicitly state the goal?
- How does a player win? How does the player know the end state of the game?
- What are some of the main rules of the game? How does the game present rules?
- What's the core loop (the fundamental activity repeated throughout the game)?
- How does the core loop change (difficulty or complexity) over time?

9 Game Taxonomy Categories



Representation of the physical surroundings in which the player is immersed, also known as the game world.



- Where is the player in the game world?
- How does the player view/experience that world?

9 Game Taxonomy Categories



The nature of the game world and story.

-  Fantasy
-  Mystery

- Where is the game world on the scale from realistic to fantastic?
- Does the player know the nature of the world, or must the player figure that out?

9 Game Taxonomy Categories



- How is the player represented in the game? What is the representation of the play in the game world?

- What are the sensory aspects of the game world (see, hear, touch, taste, smell)?

- What pieces and other players are included in the gameplay? Are they active (they can interact with the player) or passive?

- What failure can the player experience and learn from in the game world that would not be possible in the real world?

The player's perceptual and affective relationship with the game fiction.

- Pieces & Players
- Sensory Stimuli
- Representation
- Safety

9 Game Taxonomy Categories



- What type of challenge is the player facing?
- How difficult is it to tackle?
- What makes it difficult to tackle (conflict)?
- What surprise elements does the player notice? How much information gap does the player gain in the problem definitions (from clear to a total mystery)?
- How does the game change its difficulty and complexity based on the player's actions (adaptation)?

Both the presentation of problems in a game as well as the nature and difficulty of such problems.

-  Adaptation
-  Surprise
-  Challenge
-  Conflict

9 Game Taxonomy Categories



- How and when does the system communicate with the player?
- How does the player interact and communicate with the system?

Specific communication rules of the game between the player and the system.



(Interactive) Language and communication

9 Game Taxonomy Categories



- How do players know how they are doing in terms of achievement? (score)

- How do players progress against game goals? (progress)

The nature and content of any feedback, such as debriefings, given to the player during the game.

- ★ ★ ★ Assessment (score)
- 📈 Progress (towards)

9 Game Taxonomy Categories



9 Game Taxonomy Categories

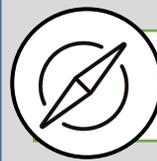
Any human-to-human contact involved in the game.

- Interpersonal interaction
- Social interaction (with players)

- Does the player interact directly with other human players within the game?
- Does the player interact socially (such as via social media or an external platform) with other human players in the game?



4 Phases of the Journey



DISCOVERY



ONBOARDING



SCAFFOLDING



MASTERY/ENDGAME



Goal: Intrigue

- How do I hear about this?
- Do I want to go there?
- Who else is doing it?



Goal: Ropes & Hooks

- I'm here. What's this about?
- Should I start it? How?
- Who else is doing this?



Goal: Flow

- How do I play?
- Am I doing the right things? Am I progressing towards the goal?
- How can I improve?

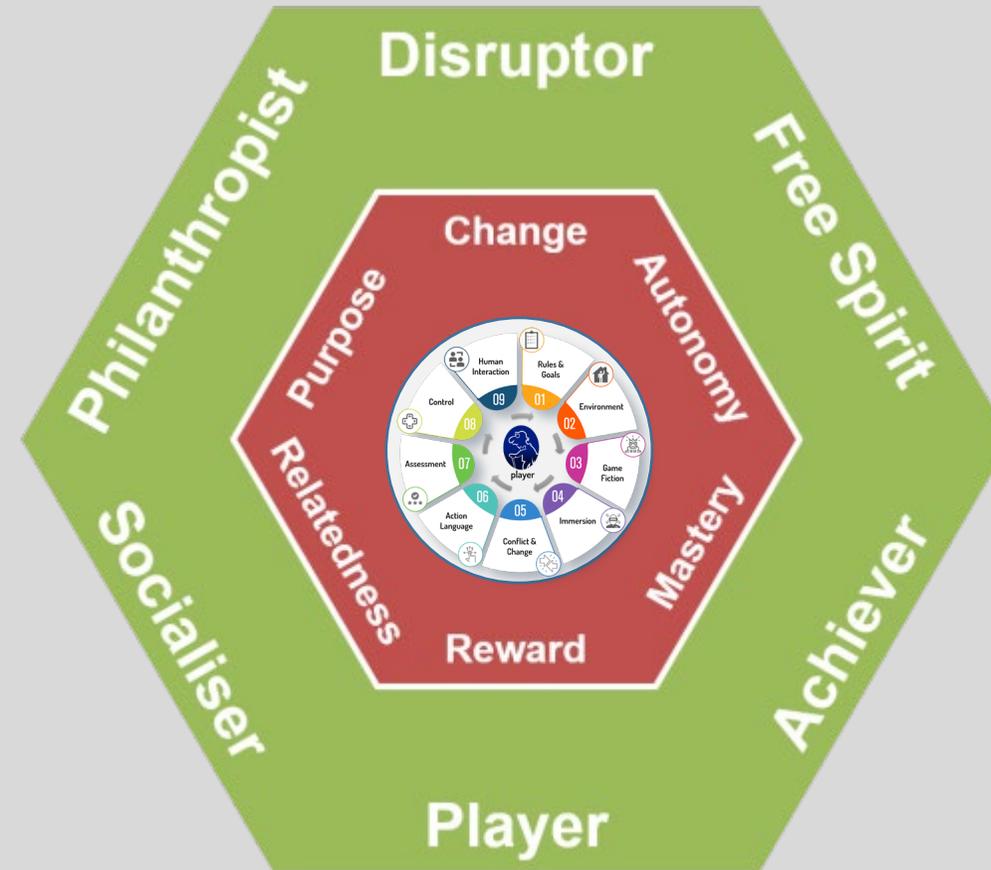


Goal: CCTA*

*celebrate & call to action

- Wow! I did it. Now what?
- What else is out there?
- How do I compare to others?

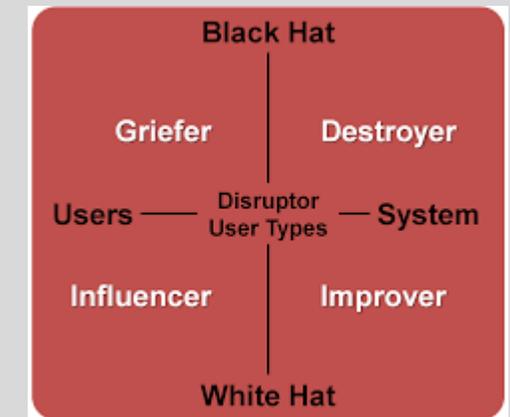
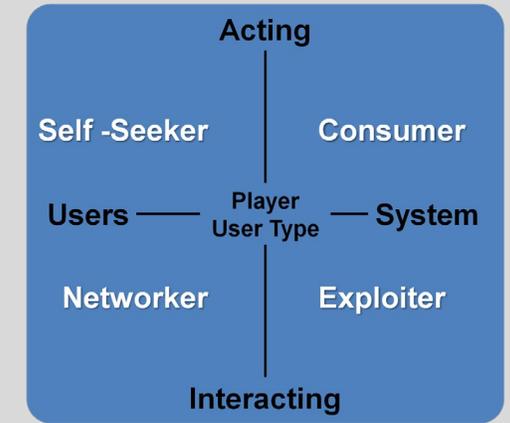
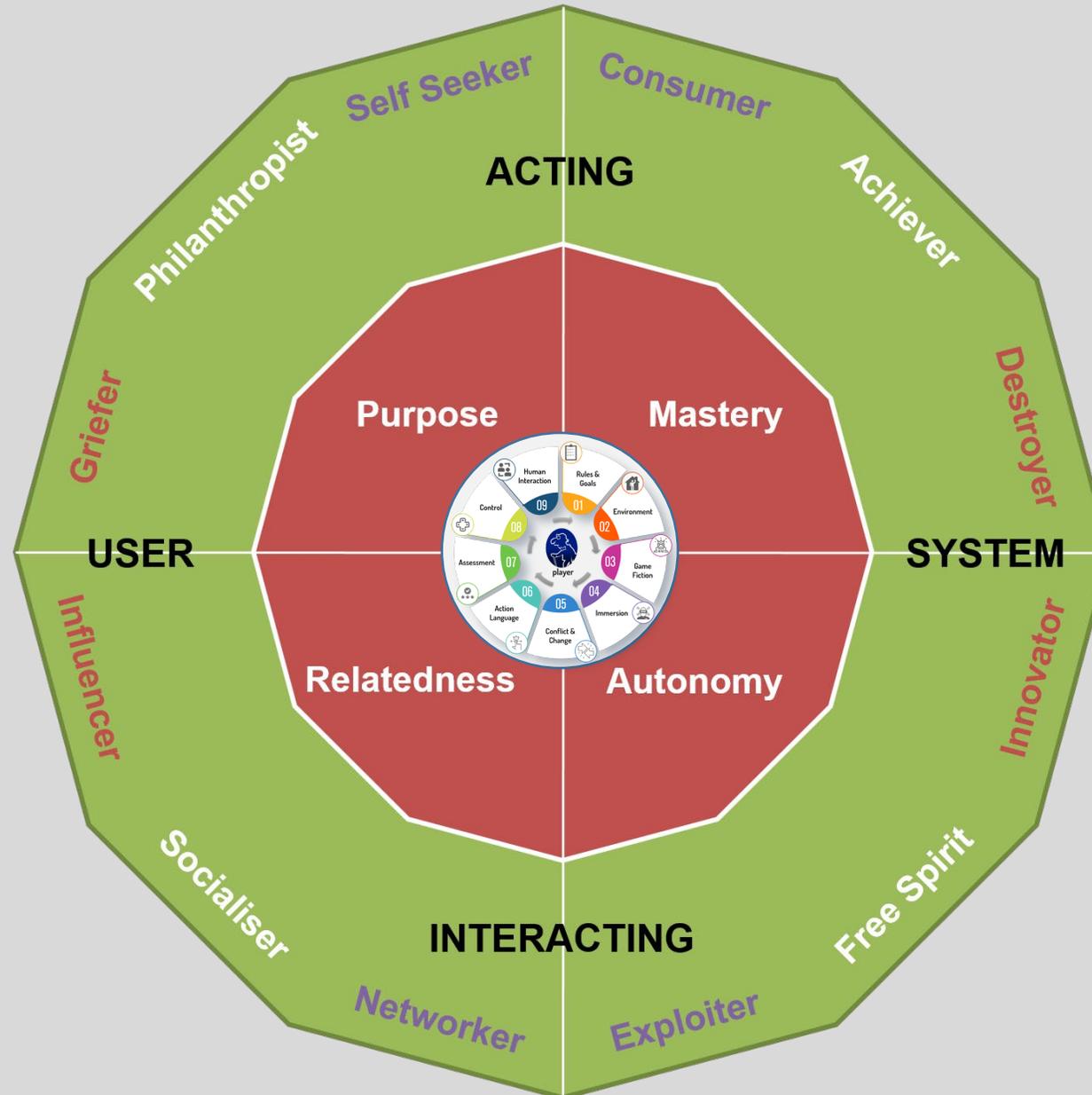
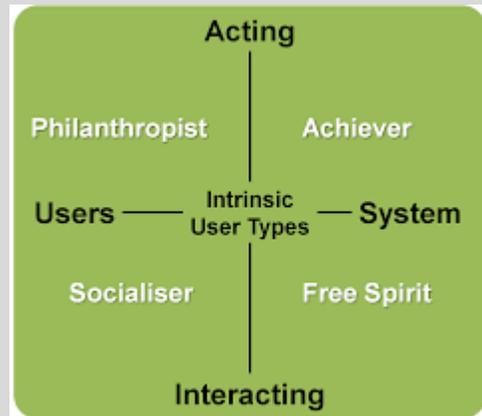
What motivates the Player through the journey?



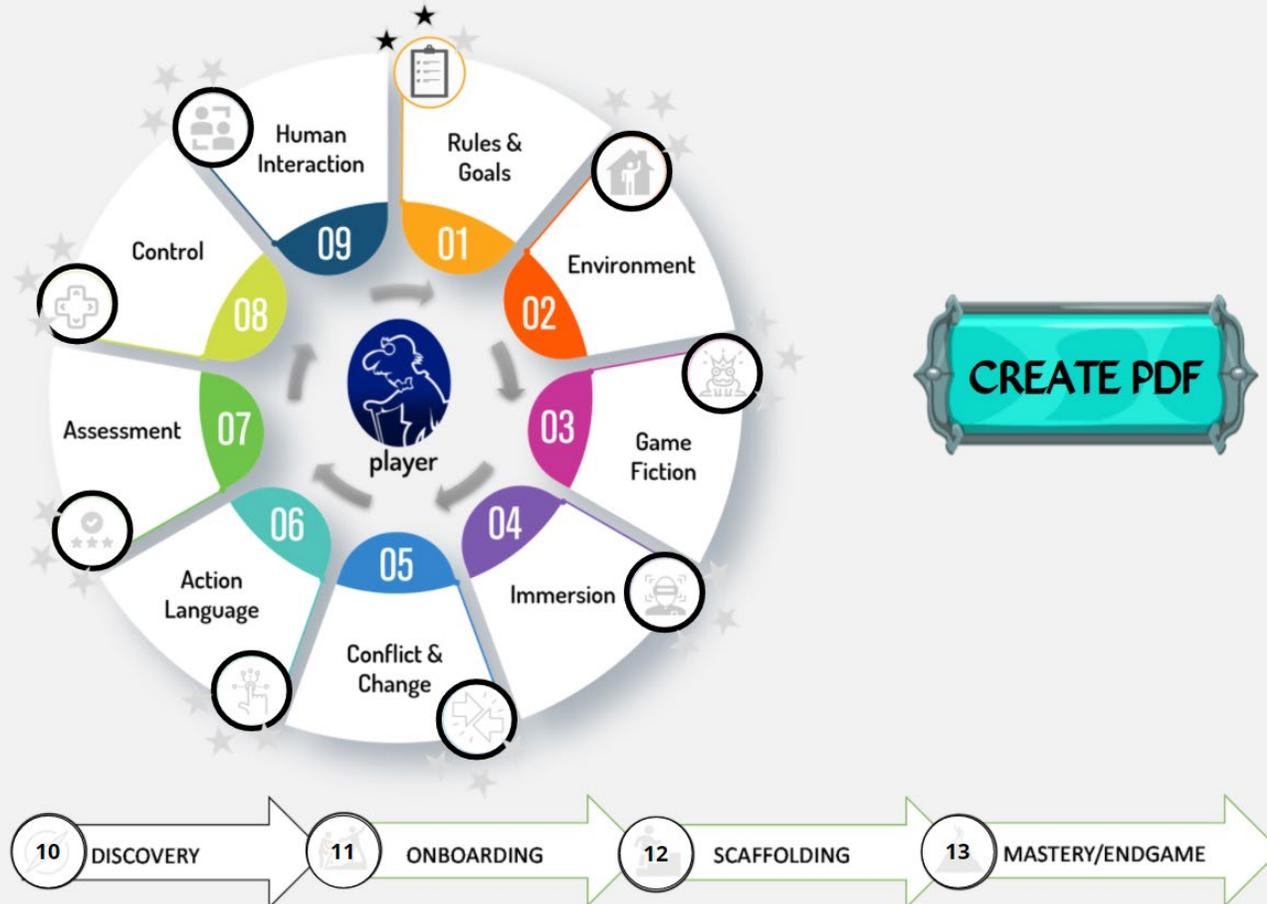
© Andrzej Marczewski 2016



What motivates the Player through the journey?



Deliberate Play Worksheet



Interactive Storyline module to produce a PDF on the fly.



Computer score: 0



player's turn

Sweller, Ayres and Kalyuga:
Cognitive Load Theory (CLT)
Because short-term memory is limited, learning experiences should be designed to reduce working memory 'load' in orde[...]
2011

Bandura, Ross & Ross: Bobo Doll Experiment

Richard Mayer: Cognitive Theory of Multimedia Learning

Lev Vygotsky: Zone of Proximal Development



> Your score: 0

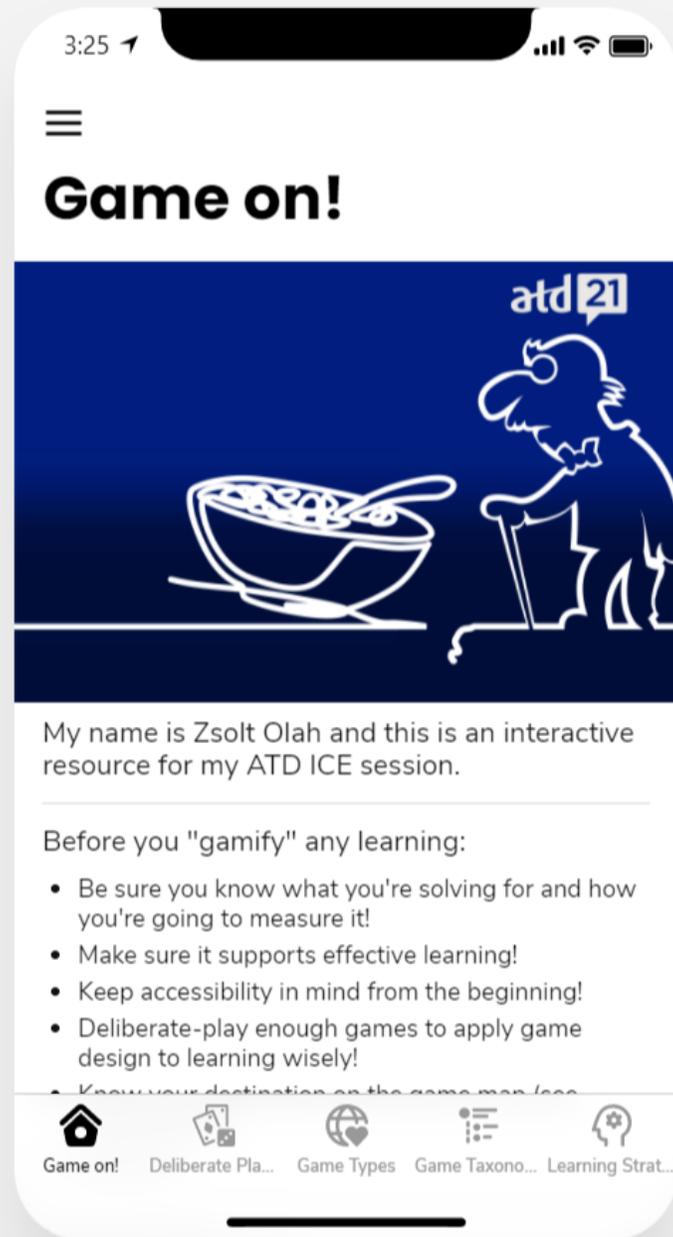
60/60 60/60 60/60

The game interface is set against a dark wood-grain background. It features a top-left score display, a row of three blue cards with a white rabbit character, and a central text box for the player's turn. Below this are three more blue cards with text, and a fourth one on the right. At the bottom, there is a score display and three progress indicators.



- Start your VIP game club
- REFRAME
- Move content to actions
- Examples of gamified learning

Glide App with a List of Games to Play



Deliberate Play

by Zsolt Olah

Interactive app with a game taxonomy and a list of recommended games to play for learning professionals.

SHOW FULLSCREEN

SHARE APP



Connect With Zsolt



Zsolt Olah  (He/Him)

Amazon Web Services (AWS) - Digital Learning & Experience Manager

Talks about #learning, #elearning, #gamification, #digitallearning, and #instructionaldesign

Philadelphia, Pennsylvania, United States · [Contact info](#)

11,881 followers · 500+ connections

[Open to](#) [Add section](#) [More](#)

 Amazon Web Services (AWS)

 University of Debrecen (UD)



Interactive app (Glide app):

Deliberate Play worksheet (PDF/Word)

Deliberate Play worksheet interactive (Storyline)

Infographic

Books and publications:

Game Thinking for L&D: From Content to Action by Zsolt Olah

Play to Learn by Sharon Boller & Karl Kapp

The Gamification of Learning and Instruction: Game-based Methods and Strategies for Training and Education by Karl Kapp

Building Blocks of Tabletop Game Design: An Encyclopedia of Mechanisms by Geoffrey Engelstein & Isaac Shalev

The Octalysis Framework for Gamification & Behavioral Design by Yu-Kai Chou

Even Ninja Monkeys Like to Play: Unicorn Edition by Andrzej Marczewski

Theory of Fun by Raph Koster

Where to play?

Your own “game club” – Well, you need to create that.

Game Garage – Monica Cornetti (Sententia Gamification)

What else?

Twitch.tv

Boardgamegeek.com



**FEEDBACK
COUNTS**

Your feedback helps ATD continue to provide top-notch educational programs that help you stay on top of a changing profession.

Evaluations forms for this session are available via the **mobile app** and at the following link: atdconference.org/attendees.