

We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

6,900

Open access books available

186,000

International authors and editors

200M

Downloads

Our authors are among the

154

Countries delivered to

TOP 1%

most cited scientists

12.2%

Contributors from top 500 universities



WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.
For more information visit www.intechopen.com



Mind Matters: Influencing Key Stakeholders

Heer Johan de, Rafal Hryniewicz, Groot Thomas de,
Edward Faber and Tije Oortwijn

Additional information is available at the end of the chapter

<http://dx.doi.org/10.5772/intechopen.76248>

Abstract

Mind Matters is an interactive game-based learning method designed to enrich the set of assessment and training instruments. Mind Matters is a training solution regarding leadership. Mind Matters evaluates participants on their personal leadership style regarding several dimensions. Here we focus on the competence of “influence key stakeholders.” Within Mind Matters, the player assumes the role of a junior researcher in a fictional company. The player’s task is to try out a mind-steering device by temporarily “taking over” game characters and steering their behaviors. Mind Matters generates an evaluation report for integration in an overall assessment evaluation of the participant or blended training program.

Keywords: game-based learning, leadership, performance assessment, formal training, learning by doing

1. Introduction

Leadership [1, 2] is crucial for business success but rather difficult to develop and maintain. It is to be argued whether, to be an effective leader, one should be able to influence others. Various influencing tactics have been studied. Here we adopt the taxonomy by [3]. These authors distinguish between hard and soft tactics. Hard influencing tactic behaviors are perceived as more forceful and push the person to comply. Soft tactics are influence behaviors which are considered thoughtful and constructive. Hard tactics include:

exchange (behavior makes explicit or implicit a promise that others will receive rewards or tangible benefits if they comply with a request or reminds others of a favor that should be reciprocated)

legitimizing (behavior seeks to persuade others that the request is something they should comply with given their situation or position)

pressure (behavior includes demands, threats, or intimidation to convince others to comply with a request or to support a proposal)

assertiveness (behavior includes repeatedly making requests, setting timelines for project completion, or expressing anger toward individuals who do not meet expectations)

upward appeal (behavior seeks the approval/acceptance of those in higher positions within the organization prior to making a request of someone) and

coalitions (behavior seeks the aid of others to persuade them to do something or uses the support of others as an argument for them to agree).

Soft tactics are:

personal appeal (behavior seeks others' compliance to their request by asking a "special favor for them" or relying on interpersonal relationships to influence their behavior)

consultation (behavior seeks others' participation in making a decision or planning how to implement a proposed policy, strategy, or change)

inspirational appeal (behavior makes an emotional request or proposal that arouses enthusiasm by appealing to others' values and ideals or by increasing their confidence that they can succeed)

ingratiation (behavior seeks to get others in a good mood or to think favorably of them before asking them to do something) and

rational persuasion (behavior uses logical arguments and factual evidence to persuade others that a proposal or request is viable and likely to result in task objectives).

The Mind Matters game [4] allows the players to experiment with these influencing tactics, tell stories with them, and experience the consequences of their actions, to learn about the leadership competence of influencing others.

2. Mind Matters: Influencing others

Within Mind Matters, the player assumes the role of a junior researcher in a fictional company. The player's task is to try out a mind-steering device (**Figure 1**) by temporarily "taking over" game characters and steering their behaviors. By doing so, the player influences the dialog between game characters and, subsequently, the game narrative.

The players are guided to learn about influencing others, by inclusion of three goals in the game:

- do research, which translates into gathering and interpreting information as well as experimenting with as many influencing tactics as possible
- improve team spirit, which means trying to find the most effective influencing approach in each situation where the outcomes impact team morale the most

- improve customer relationship, which entails using effective tactics in game situations where relationships with external parties are at stake.

We have chosen a number of relevant business situations and written personnel files for each in-game character. These files describe the personal background of the game characters as well as their competence profiles (**Figure 2**).

The story of Mind Matters unfolds going through these situations, in which the game characters act out conflict situations. Players can interfere in each situation from which it is immediately clear that leadership behavior in terms of “influencing key stakeholders” is required (**Figure 3**). The player uses the mind-steering device to take control of one of the game characters in a scene and decide which influencing tactic that character will adapt. This determines the dialog, the reaction of the other characters, and the resulting story. Game characters are influenceable in various degrees, depending on their profile, their conversation partner, and the situation they are in. In the meantime, players get an overview depicting the key characters and their current state. This also provides an opportunity to reflect on the actions and their consequences, to read updated personnel files, as well as to study their score sheet, pertaining to their three game goals.

Apart from being able to control or steer the game characters in their conversations, the mind-steering device also enables players to read the minds of all characters involved in the scene, including those who are beyond their control. Reading minds shows situational and generic character-related information and, writing minds, steers the game character in taking one of four allowed actions (**Figure 4**).



Figure 1. Mind-steering device.

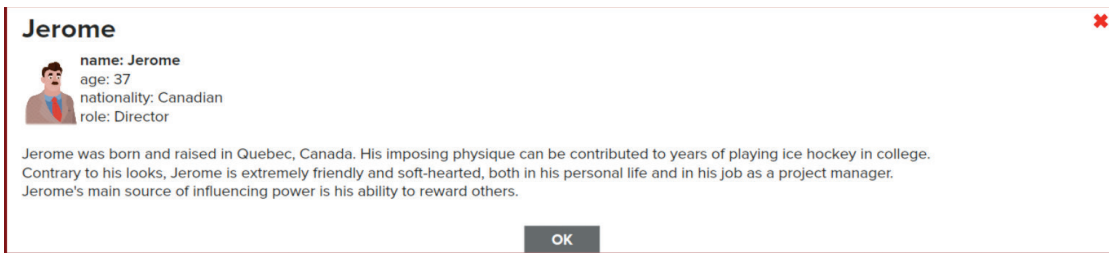


Figure 2. Personnel files of one of the game characters.

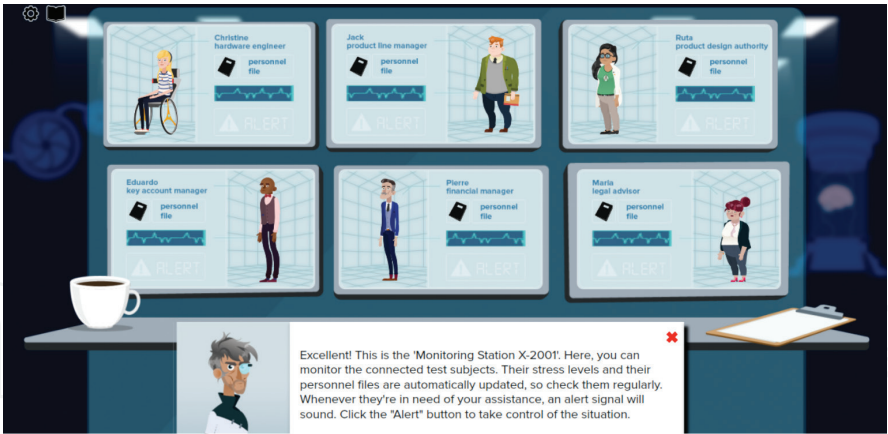
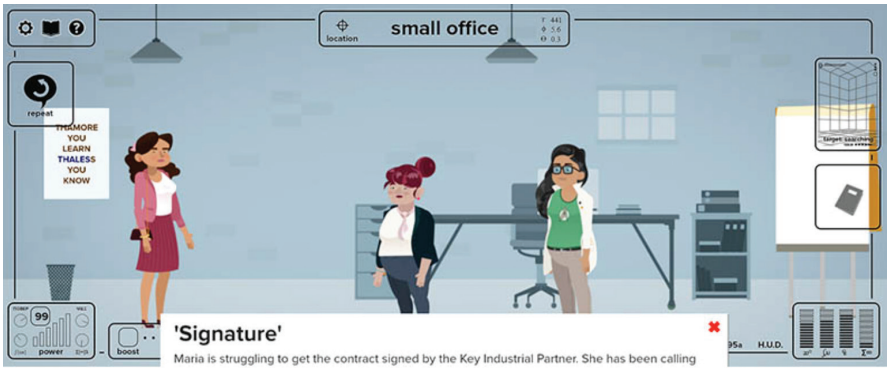
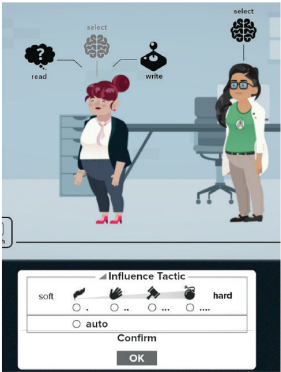


Figure 3. Current state of the influenceable game characters.



(a)



(b)

Figure 4. (a) The scene (upper figure). (b) Read and control the game character's mind.

A game character's mind can be steered into using one of four influencing approaches: (a) a hard, (b) a medium hard, (c) a medium soft, or (d) a soft influencing tactic. The influencing tactics explained earlier are clustered into these four categories:

- hard (pressure, assertiveness, legitimating)
- medium hard (coalition, exchange, upward appeals)

- medium soft (ingratiating, rational persuasion, personal appeals)
- soft (inspirational appeals, consultation)

Note that as a player, you have no control over the utterances themselves but decide which influencing tactic the game character will adopt.

The effect of these adopted influencing attempts is immediate: The controlled character uses the tactic chosen by the player and, depending on their ability and skill, translates this into words. The effect of each influencing attempt can be positive, neutral, or negative. This feedback takes form of the utterances spoken by the characters and the appropriate animated stance/body language, to give a more complete feedback to the player.

Following the programmed computational model, the game determines which reply the conversation partner (the character that is being influenced) gives and what impact the dialog has on the key performance indicators (KPIs), team spirit, customer relationship, and research (Figure 5).

The accumulated scores on these KPIs determine the narrative of the game. Each interactive situation in the game is based on a different conflict between certain game characters.

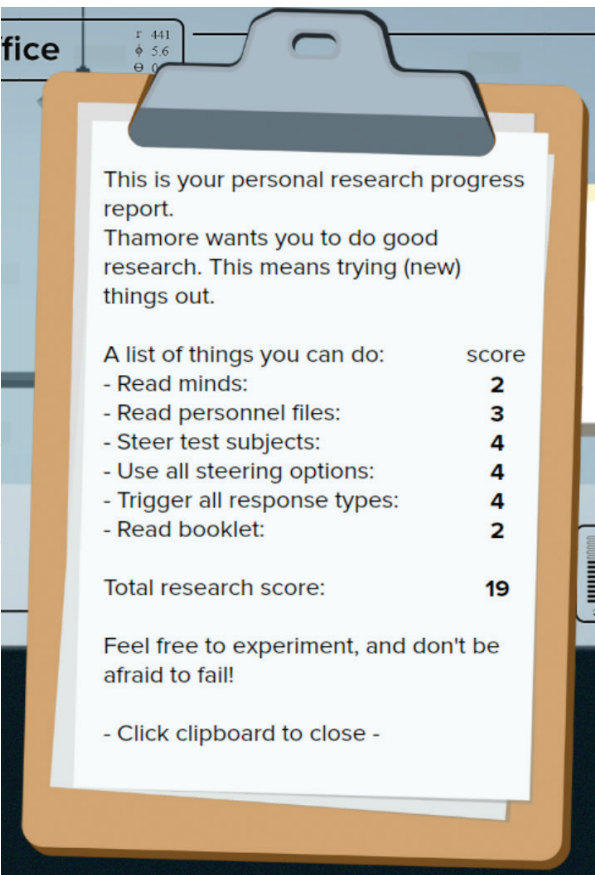


Figure 5. Playing style and KPIs.

This conflict can even evolve during a scene (each action may require a different approach). Player’s choice defines how each conflict is resolved.

To provide additional inspiration, education, and guidance for the player, there is a source of information about influencing in the game, in the form of a booklet. Its contents cover most relevant topics of the theory and practice of influencing and often relate directly to the conflict situations themselves.

The game requires about 45 minutes to play for the first time. Subsequent play troughs take significantly less time, by allowing the player to choose individual interactive scenes directly, in order to experiment with different approaches and experience their outcomes.

3. Feedback

The in-game feedback relates to the game goals. So, in-game feedback pertains to your performance as a researcher and the score on team spirit and customer relationship KPIs. Post-game feedback (Figure 6) pertains to the meta-goal of the game and provides feedback on how the player dealt with conflict situations: what was done vs. what was needed in terms of influencing, per scene. Additionally, pointers to other educational resources for further development of leadership competence are provided.

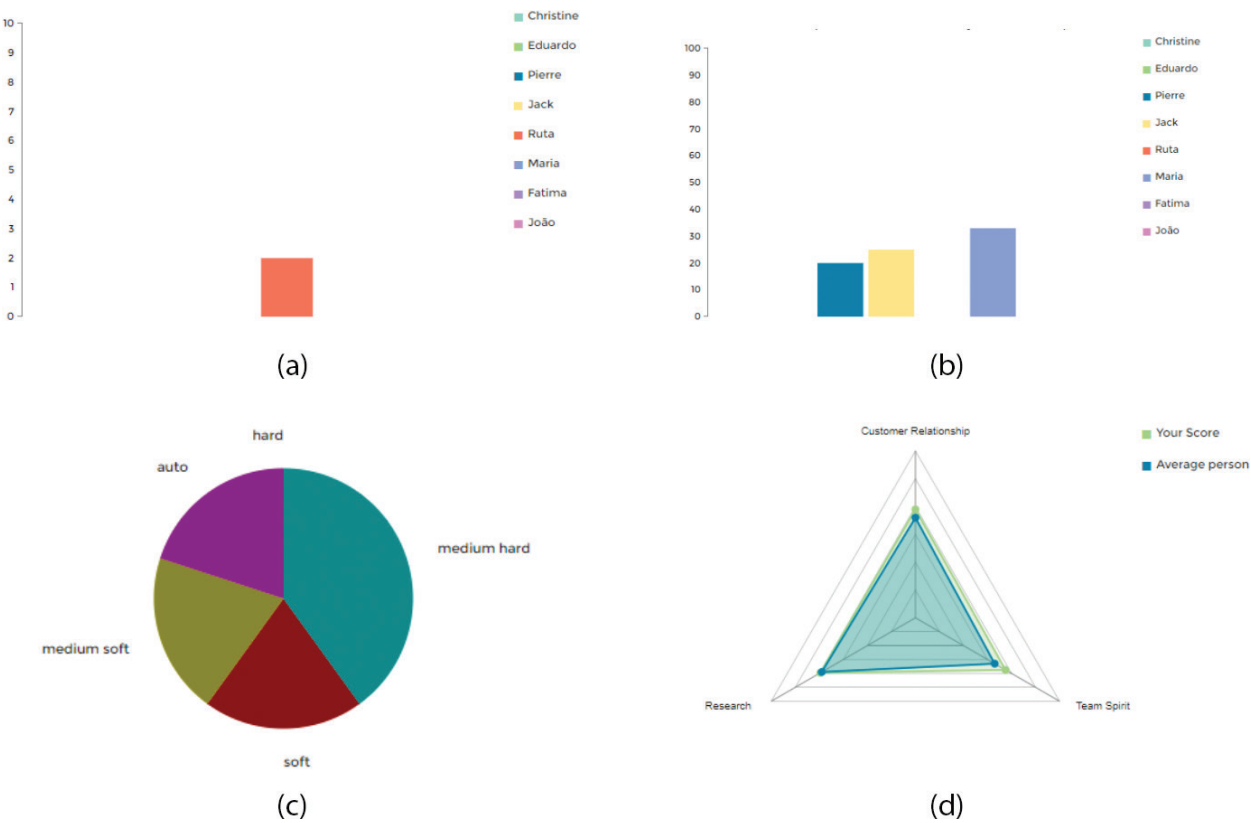


Figure 6. a–d. Post-game feedback.

4. Mind Matters for formal trainings

4.1. Didactical approach

The instruction on how to play this game is inspired by an *inquiry-based learning cycle*, which identifies five distinct phases: orientation, conceptualization, investigation, conclusion, and discussion [5] (see **Figure 7**). In the first two phases of this cycle (*orientation* and *conceptualization*), trainees are asked to formulate hypotheses about a particular question in need of investigation. During the *investigation* phase, trainees check whether a hypothesis is correct or not by conducting several experiments. During the last two phases of the inquiry learning process (*conclusion* and *discussion*), trainees are linking their hypotheses with the evidence collected during the investigation phase. Trainees are also reflecting on their learning processes and outcomes, comparing and discussing these with other trainees facilitated by a trainer.

4.2. Trainer instructions¹

The question in the Mind Matters game is: Which influencing tactics yield positive or negative results in specific business situations? During the investigation, trainees are trying out different hard and soft influencing tactics and approaches in order to learn about their effectiveness and impact in different contexts and situations. Conceptually, our *conflict-situational model* provides the frame of reference (**Figure 8**).

First, trainees are encouraged to consider the influencing tactics (hard, medium, soft), the conflict in a given situation, and the game characters involved in the conflict and to think how to approach this situation. Trainees should ponder these questions:

- What do you want to achieve or want to avoid?
- Do you differentiate in who is saying what?
- Do you take a proactive or a more reactive approach?
- Do you take into account the possible implications of decisions?

This first phase resembles the orientation and conceptualization phase of the inquiry learning cycle.

Second, trainees start investigating in several ways. Initially, trainees may play the game based on their own insights and frame of reference. Then, they might play the game, focusing on maximizing or minimizing their score on one of the KPIs.

Finally, in line with the last two phases of the inquire learning cycle and based on the in-game and post-game feedback trainees receive, they are encouraged to think and discuss together

¹Note that Mind Matters is also recommended for informal trainings; the same instruction applies; however, the social learning aspect and the discussion among peers facilitated by a trainer are lacking. (Sign up for a 2-months free trial: <http://www.txchange.nl/leadershipbook>).

(social learning) how they would explain their results, based on the mental image they had initially and their assumptions regarding the factors that influence(d) them. The trainer also facilitates the transfer of knowledge and application to real-life situations that trainees might experience in their daily practice. In this way, this new type of learning experience helps trainees explore the consequences of different influencing styles and learn from these experiences.

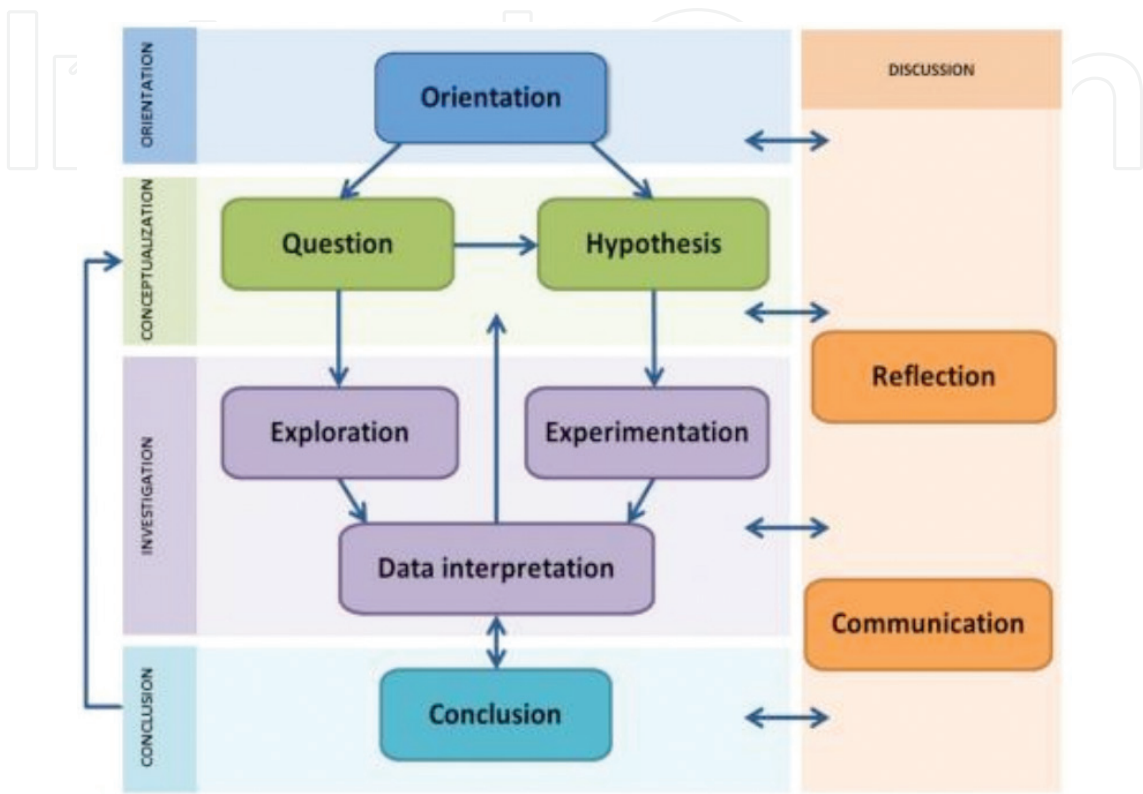


Figure 7. Inquiry-based learning circle [taken from 6].

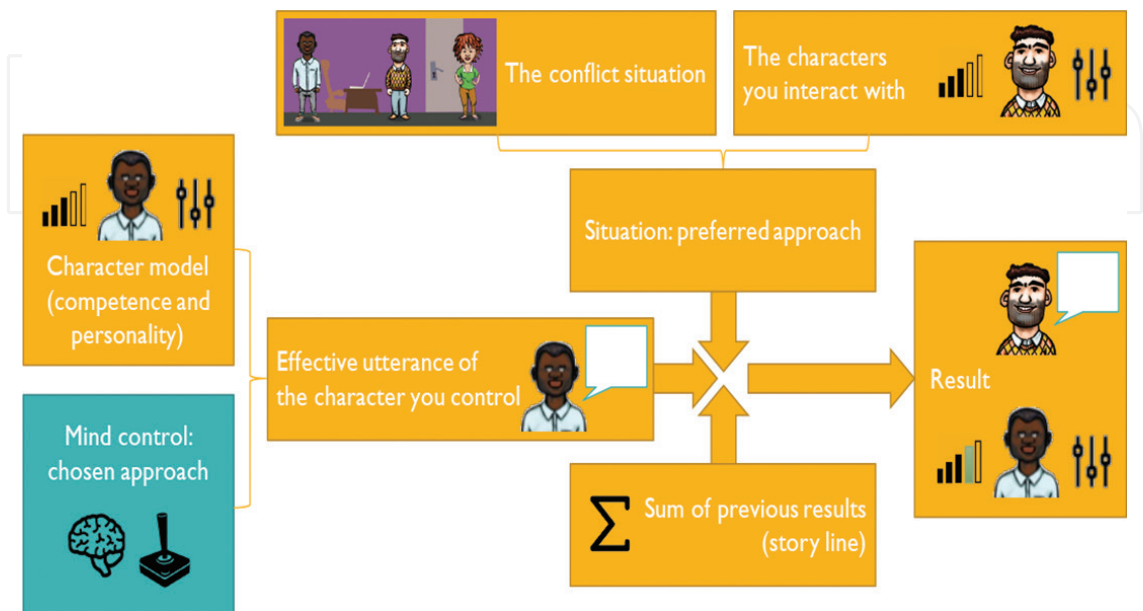


Figure 8. Conflict-situational model.

5. Game model

The simplified dynamic game model [7] integrates and balances several game components [8]: *mechanics* (the procedures and rules of the game), *aesthetics* (how the game looks and sounds), *technology* (the tools and systems to implement the gameplay), and *story* (the narrative aspect of the game). The *story* should be plausible, realistic, and valid with a high degree of fidelity from the player's point of view. To put it differently, the player should be able to mentally map his/her world to the in-game world and vice versa. **Figure 9** depicts an overview of the game components and the underlying aspects that from a game designer point of view needs to be taken into account to develop such a game. Player agency—the perceived experience that you can influence the narrative and storyline—increases the user experience [9].

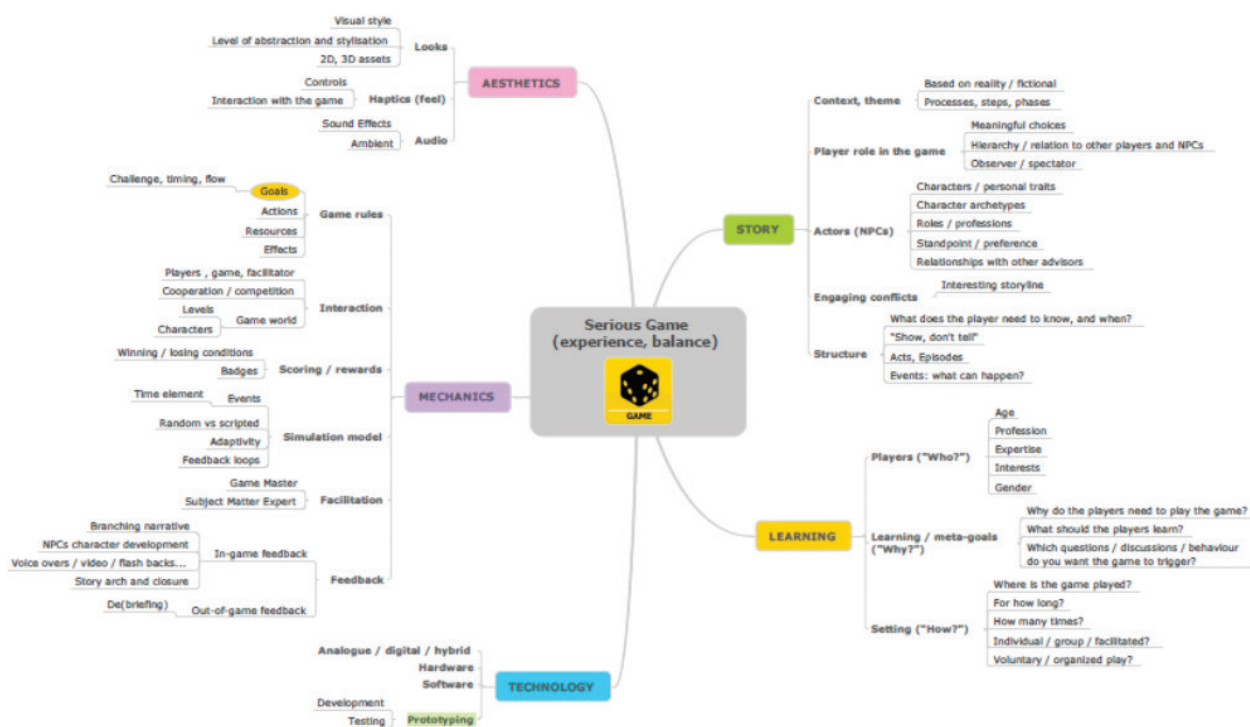


Figure 9. Balanced game components.

Acknowledgements

Thales University—The Learning Hub for input, feedback, and deployment of Mind Matters in the Thales company worldwide. Specific thanks to David Butler, Jean-Roch Hollier, Natalie Barre, Marc-Henri Marius, Matthieu Esteveleopez, and Doug Chapman.

Notes

This chapter is a slightly modified version of Johan de Heer, Rafal Hryniewicz, Thomas de Groot, and Edward Faber (2017). Mind Steering Leadership Game. © Springer International

Publishing AG 2018, J.I. Kantola et al. (eds.), *Advances in Human Factors, Business Management and Leadership, Advances in Intelligent Systems and Computing* 594, DOI 10.1007/978-3-319-60372-8_29, p. 299-308.

Author details

Johan de Heer*, Rafal Hryniewicz, Thomas de Groot, Edward Faber and Tije Oortwijn

*Address all correspondence to: johan.deheer@nl.thalesgroup.com

Thales Research and Technology, University of Twente, Enschede, The Netherlands

References

- [1] Goleman D. What Makes a leader? *Harvard Business Review*. 1998;**76**:93-102
- [2] Goleman D. Leadership that gets results. *Harvard Business Review*. 2000;**78**:78-90
- [3] Hall A, Barrett L. Influence: The essence of leadership. Nebguide. University of Nebraska [Internet]. <http://extensionpublications.unl.edu/assets/pdf/g1695.pdf>
- [4] de Freitas S, Liarokapis F. Serious games: A new paradigm for education? In: Ma M, Oikonomou A, Jain LC, editors. *Serious Games and Edutainment Applications*. London: Springer; 2011. pp. 9-23. <https://doi.org/10.1007/978-1-4471-2161-9>
- [5] Pedaste M, Mäeots M, Siiman LA, de Jong T, van Riesen SAN, Kamp ET, Manoli CC, Zacharia ZC, Tsourlidaki E. Phases of inquiry-based learning: Definitions and the inquiry cycle. *Educational Research Review*. 2014;**14**:47-61
- [6] www.go-lab-project.eu
- [7] Klabbers HG. *The Magic Circle: Principles of Gaming and Simulation*. 3rd & rev. ed. Rotterdam: Sense Publishers; 2009
- [8] Schell J. *The Art of Game Design: A Book of Lenses*. 2nd ed. Natick, Massachusetts: A K Peters/CRC Press; 2008
- [9] Csikzentmihaly M, Csikzentmihaly M. *Flow: The Psychology of Optimal Experience*. Vol. 41. New York: Harper Perennial; 1991