

Using “Game Balancing” in the broad sense, Schell [2008] presents a list of possible dimensions to consider:

1. Justice between players
2. Degree of difficulty
3. Significance of player choices/actions to game outcomes
4. Importance of luck (vs. player skill)
5. Importance of thinking vs. fast and efficient control action
6. Competition and/or cooperation
7. Game length (in time)
8. Balancing of game rewards
9. Balancing of game punishments
10. Greater freedom of player action vs. less rich choices
11. Simplicity vs. complexity (in overall game, and in specific game actions)
12. Greater content detail vs. more room for player imagination

(For a brief description of these 12 dimensions, in Portuguese, see [\[Frosi, 2010\]](#).)

But we could add many other dimensions (dimensions suggested by Pedro de Almeida - your lecturer):

13. Number of players (in the overall game, in the “working teams” used in the game, etc.. Is it the correct one to make the game really interesting?)
14. Dimensions of the playing field (see the example of Tetris, in [“Game Feel”, Swink, 2009])
15. Fast/slower (Is the game speed appropriate? Can it be chosen/set by each player? Does it maximize the game attractiveness?)
16. Turn-based/”real time” (Is the game run in “real time”, or is it “turn based”? Could it use another “rate of execution” concept? Would it be better or worse with another alternative?)
17. Casual/hardcore (Is the game optimized in terms of the gamer dedication it requires? Does this game dedication change during the evolution of the game? Is it appropriate to maximize the user base? Is it appropriate to the game concept?)
18. Permanent universe/recurrent game (Is the game based on independent gaming instances (example: Tetris) or is it based on a durable context universe, where the results of previous playing affects the next playing sessions? Is the solution appropriate? If it exists, what is the degree of continuity? (e.g. in some games, previous playing affects the available tools for future games, but each game is an individual experience. Other games develop in a truly time-continuous universe, which keeps evolving through time even when the player is not online.)

Further examples of balancing dimensions to consider (in Portuguese, ideias added by the students of the course, after general discussion over the subject):

19. Entender a necessidade do jogador (conhecer o público alvo)
20. Determinar o objetivo do jogo (SE tiver)
21. Balancear os componentes do jogo de acordo com o gênero
22. Definir o suporte do jogo

For the practical group work in the course (in Portuguese):

Alguns aspectos a analisar nos jogos comerciais, em termos de balanceamento:

- Perceber qual é a solução/soluções usadas em cada um ds pontos da lista.
- Tentar perceber se a solução foi ou não facil de encontrar (se o prob. foi facil de resolver).
- Julgar se a solução é a melhor ou não. Quais seriam as outras possiveis? O que acham os jogadores reais (ver comentários em foruns de discussão, etc.)?
- O jogo tem sucesso ou não? Muito, pouco? Porquê, exactamente?