GameFlow: A Model for evaluating Player Enjoyment in Games

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Importance of Players Enjoyment

- Players enjoyment is central to game design
- Games are played to enjoy the process rather than the reword
- Game development heuristics

Flow Theory

- Flow
 - Complete immersion
 - Altered perception of time
 - Enjoyable

- Elements of Flow state

- The task that can be completed
- The ability to concentrate on a task
- That concentration is possible because the task has clear goals
- That concentration is possible because the task provides immediate feedback
- The ability to exercise a sense of control over actions
- A deep but effortless involvement that removes awareness of the frustrations of everyday life
- Concerns for self disappears
- The sense of duration of time is altered

The GameFlow model

- The eight elements of game enjoyment
 - Concentration: the game must be able to hold the players attention
 - Challenge: The game must be sufficiently challenging
 - Player Skills: The game must support players skill development
 - Control: The player should feel the sense of control over their actions
 - Clear Goals: The game should have clear goals
 - Feedback: The game must give feedback (e.g. state, actions or goal progression)
 - Immersions: Player must experience deep involvement
 - Social Interaction: The game should create opportunities for social interactions (e.g. cooperation, communication)

Gameflow model in practice: RTS games



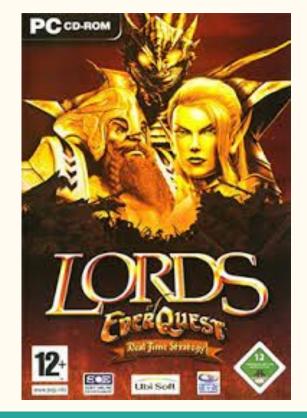
Warcraft III

 ${\it Release:2002}$

Rating: 94%

Lords of EverQuest

Release: 2003 Rating: 61%



	Warcraft III		Lords of EverQuest	
Concentration	 High quality stimuli Each race has a different theme Only focus on interesting tasks 	5	 Visually good Each unit has only 2-3 phrases Missions: repetitive and limited Focus unimportant tasks (micro managing) Game is slow 	2.5
Challenge	 Good progression in campaign difficulty PvP or against AI too hard 	4.5	Campaign too easy (no strategy)Each faction has the same playstyle	2
Player Skills	 Play immediately, optional tutorial Races and buildings added gradually Simple game interface 	5	 Play immediately, obligatory tutorial Poor game interface Text hard to read 	3.1

	Warcraft III		Lords of EverQuest	
Control	Control every aspectSimple interface	4.8	- Players don't have full control	2.3
Clear Goals	- Cutscenes present goals	5	No clear introductionNo story (game tells what to do but not why)	1.5
Feedback	Notification goal / missionMap guides players	5	 If a mission is failed, notification at the end of the mission 	2.7
Immersion	- Concentrate, tasks, graphic, sound	5	- Too slow	1
Social Interaction	Multiplayer simpleFree online	4.3	Chat + multiplayerToo small community	3.7
TOTAL		4.8 = 96%		2.4 = 48%