



COOPERATION IN GAMES



WORKING WITH OTHERS TO ACCOMPLISH SHARED GOALS TO EVERYONE'S BENEFIT.

Cooperation means working with others to achieve shared goals, to everyone's benefit. Humans' willingness to cooperate is a significant reason we've been successful as a species, while failure to cooperate has led to disputes, wars, and other unfairnesses and injustices. Cooperating allows us to use our strengths with others' strengths to get to a win state. In other words, the coordination of strengths enables us to achieve a goal that one otherwise could not have achieved alone. And that cooperation creates and reinforces relationships. Some game developers have leveraged the power of cooperation to tackle huge challenges, like in *Foldit* and *Sea Hero Quest*, which transform individual "work" into big data to fight disease and advance scientific knowledge. Players can cooperate with each other towards solving a larger goal or problem. Many RPGs allow players to cooperate with each other and even with non-player characters (NPCs) toward a common goal. Studies show that playing video games in co-op mode can lead to cooperative behaviors in the real world. Another perk: coordinated action and movement releases endorphins, giving players a mood boost!

ELEMENTS TO ADD

- + Opportunity for players to actively work together for mutual benefit toward a shared goal
- + Multi-player options
- + In single-player RPGs, the ability for players to form teams of characters with complementary skills and strengths
- + The ability for players to deploy their resources or skills in the service of the team being successful in achieving the shared goal
- + The option or requirement to pool all players' resources and knowledge in order to win
- + In social games, a culture that rewards players working together for the designated goal, and dissuades or punishes players for working against their team or the designated goal

ELEMENTS TO LEAVE OUT

- Single-player mode as the only option
- An emphasis on ranking individual players rather than teams
- Mechanics that force players to turn against each other
- Situations where players end up "out" or "dead" and can't be helped by others
- Inequalities between players in terms of power, resources, and status

COMMON PITFALLS

FAILURE TO TEST

When designing for cooperation, designers should routinely check in throughout development to ensure that the win-state or end goal of the game is conducive to cooperative behaviors.

UNINTENDED INCLUSION OF COMPETITION

Developers may create a scenario that disproportionately rewards one member of the team which creates misalignment with the team goal and an incentive to not act in the interest of the team. This introduces competition within the team and increases the chance of team killing. This running counter to cooperation. For example, in many team-based games the team member who captures the most flags gets an additional bonus -- this is a competitive (not cooperative) element.

LACK OF BALANCE

Players do not need to have identical abilities, but their abilities should be balanced, or equally meaningful. For example, playing as Tails in *Sonic the Hedgehog* can be incredibly frustrating because Tails is frequently left behind or otherwise inactive due to unbalanced abilities compared to other players.

UNCOOPERATIVE BEHAVIOR HAPPENS

Just because something is framed as being cooperative or team-based doesn't mean players will play that way. Part of play is exploring the boundaries and so uncooperative behaviors - like team killing - may occur even if that behavior is not rewarded or is even punished. Consider including an option of toggling the inclusion of friendly fire so players can experience game-play with and without it, or designing the game so that harm is impossible, like in *Journey*.

GAME GENRES & TYPES



MMO & MOBA



Social Impact



RPG



Social Simulation



Cooperative Play



Party

SPECIFIC MECHANICAL REFERENCES

In *Guitar Hero* when a player makes too many mistakes, another bandmate can **help, heal, or resurrect** the player.

In *World of Warcraft*, when **players fight together** in a pick-up dungeon or a guild raid against creatures.

In *Dance Dance Revolution's* **team play mode** players try their individual best to boost the overall team score.

When all players **work together to solve a problem**, such as in *Fold-it*, *Forbidden Island*, & *Forbidden Desert*

In *Journey*, when more experienced players **act as guides** for newer players.

When players **work tactically as a squad** to defeat another group of live players, such as in *Overwatch*, *League of Legends*, and *Splatoon*.

When players **pool skills and resources to win as a group**, such as in *Forbidden Island*, and *Forbidden Desert*.

When players must **manage a well-balanced party of characters**, such as in single-player RPG's like *Dragon Age* and *Mass Effect*

In *Overwatch* when players from a team get to **collectively choose and reward** the most valuable player (MVP) on the team for that round.

ADDITIONAL RESOURCES FOR COOPERATION

Lewis-Evans, B. (2015). Antisocial Behavior in Games: How Can Game Design Help? Game Developers Conference. <https://www.gdcvault.com/play/1021799/Anti-Social-Behavior-in-Games>

Kim, A. J. (2014). The coop revolution: 7 rules for cooperative game design. G Summit San Francisco. <https://youtu.be/NlayQD4qcYc>

Honeycut, J.R. (2016). Cooperative games: advice from the experts. League of Gamemakers. <http://www.leagueofgamemakers.com/cooperative-games-advice-from-the-experts/>

Kumar, M. (2012). 5 problems with co-op game design (and possible solutions). Gamasutra. https://www.gamasutra.com/view/news/181576/5_problems_with_coop_game_design_and_possible_solutions.php

Toups, Z., Kerne, A., & Hamilton, W. (2009). Game design principles for engaging cooperative play: Core mechanics and interfaces for non-mimetic simulation of fire emergency response. In Proceedings of the 2009 ACM SIGGRAPH Symposium on Video Games (pp. 71-78). ACM. <https://pdfs.semanticscholar.org/ddd1/3511a23b2b0fa59886ba4ca3ebadf48badf4.pdf>