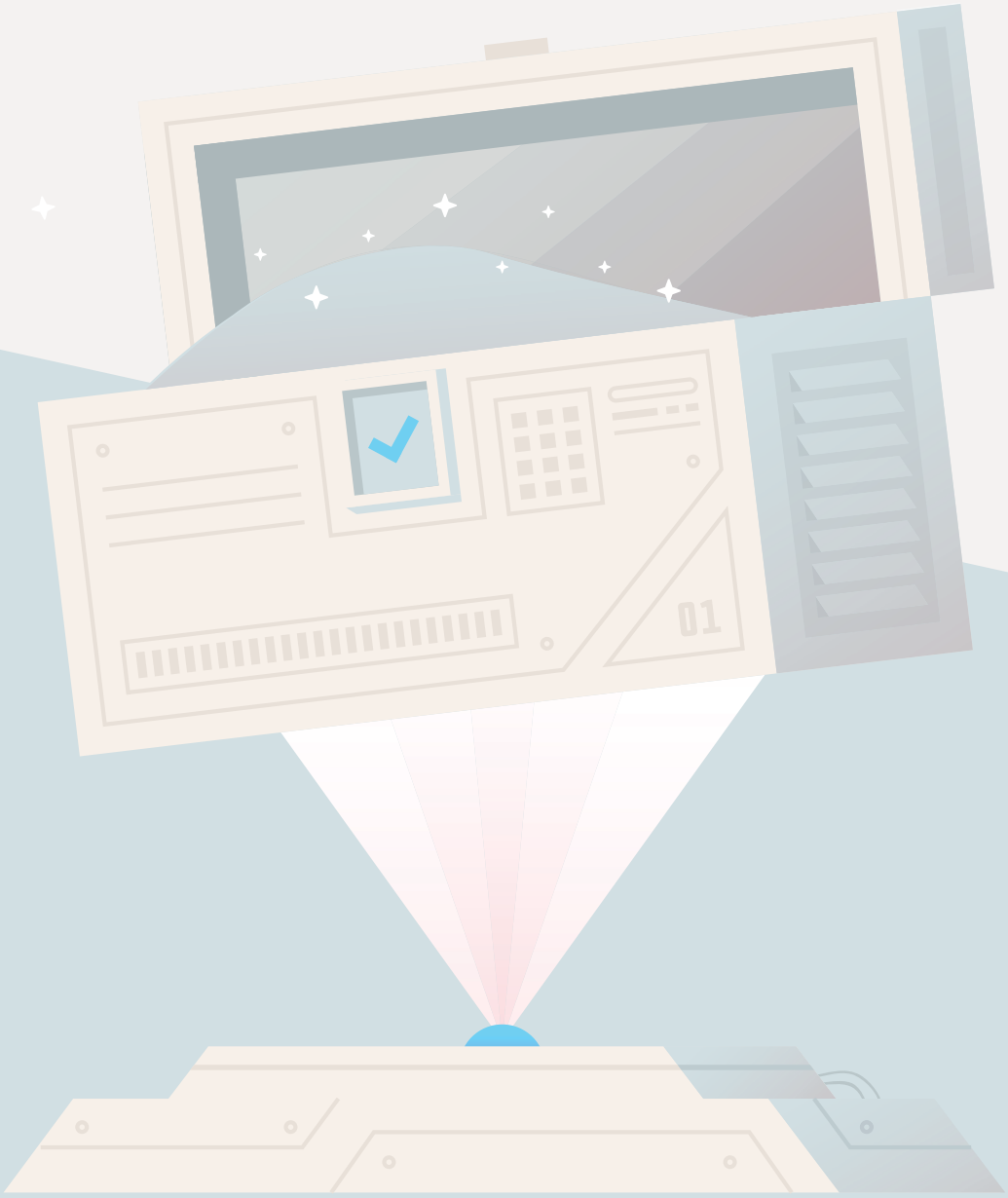
GAME DESIGN

Module 2: Goals & Pacing

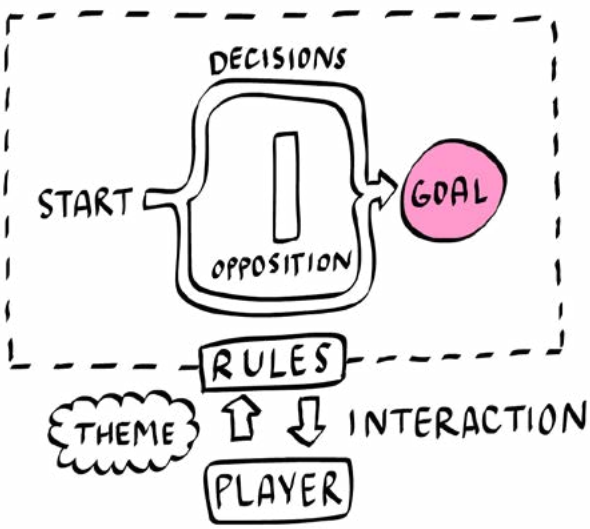


A URF ACADEMY COURSE | RIOT GAMES
VERSION 1.0

Big Ideas

Purpose

This module **focuses on the Goal** portion of the Game Design Framework. Goals are important to provide pacing (especially for subgoals) and to give players purpose.



Student Objectives

Lessons 1 and 2: Goals and Pacing

- Clear and intuitive goals let players know what they're trying to achieve at any given moment and gives meaning to their actions.
- Good goal and subgoal structure gives a game pacing that prevents a player from becoming bored or overwhelmed.
- Good goals create gameplay and are clear and intuitive, while bad goals create undesirable behavior.

Overview

Table of Contents

Materials

Teacher

- Computer / Projector
  To present external links

Students

- Paper / Pen

Goals Game Materials

- Table
- **For all groups of 4:**
  - 8 sheets of paper
  - Scissors
  - Tape
  - List of Goals *(detailed in the lesson instructions)*
  - Marker / Pen *(4 different colors is preferable, but optional)*

TOTAL TIME: 60 MINUTES

Lesson 1

Goals and Subgoals

In this activity, the game's rules are constant, but the goal of the game changes. Students will experience how this fundamentally changes the game. Students learn the difference between good and bad goals and what makes goals (and layout of goals within a game) good and bad.

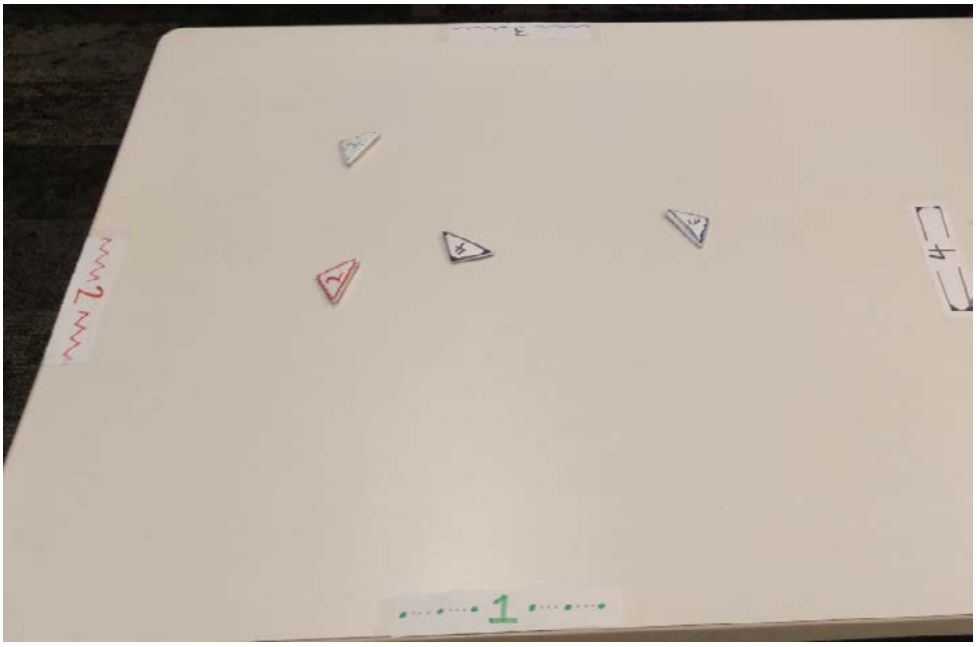
35 MINUTES

Goals Game

INTRODUCTION: 3 MINUTES

1. **Split students into groups of 4.**

2. **Explain that players will be setting up a game board as shown below.**
   They will create 4 paper footballs and 4 goals.



CREATE GAME MATERIALS: 10 MINUTES

3. **Create 4 paper footballs.**
   Requires 4 sheets of A4 or letter paper and the following instructions:
   https://www.instructables.com/id/How-To-Make-A-Paper-Football/5

   Each football requires one sheet of paper.

   While students are creating their footballs, write the rules listed in **Step 6** on the board.

4. **Decorate each paper football.**
   Footballs should have an identifying number (and, optionally, a color) corresponding to a player.

5. **Create 4 paper goals and tape them to the table as shown in Step 2.**

GAME RULES: 2 MINUTES

6. **Explain game rules.**

- Start the game by placing all footballs in the center of the table.
- If any football goes off the table, place it anywhere near the center of the table.
- The **goal** of the game is to use your football to knock any other player's football into their own goal.

  E.g., Player 3, could use their football (marked 3) to knock player 2's football into player 2's goal to score a point.
- Each player has 3 moves per turn.
- Players can move their piece in any manner, so long as it is a continuous movement.

  E.g., Flick, shove, swipe, etc.
- A player's turn ends if a football goes off the table.

PLAY THROUGH AS MANY GOALS AS POSSIBLE: 20 MINUTES

7. **When a student completes a goal, they record their victory and then play the next goal.** Play each goal for 5 minutes or until a player completes the goal.

GOALS

- **Goal: Get the most points in 5 minutes.**
  Subgoal: Score a point.
- **Goal: Have the second most points after 5 minutes**
  Subgoal: If you are 2nd, try to prevent players lower than you from scoring points. If you are lower than 2nd, try to score more points to catch up.
- **Goal: Score against each player once.**
  Subgoal: Score against a player.
- **Goal: If a player is scored against, they are out. Last player standing wins.**
  Subgoal: Determine who will be best to knock out, depending on who has "won" the most goals or who has their turn next.

8. **The player who completes the most goals is the champion.**

Teacher's Context

5 MINUTE READ

A game's pacing is accomplished by having **clear** goals and subgoals throughout to provide peaks and troughs of player engagement.

A player should have a mixture of short-term and long-term goals. Think of pacing these goals as moment-to-moment, game-to-game, session-to-session, month-to-month, etc. At each point in time, the game experience should be designed so that the player has a goal in mind.

Some players are intrinsically motivated and able to create their own goals, but some are not. In order to serve non-intrinsically motivated players, providing extrinsic motivation, such as meta-game progression systems (ways to progress outside of the core game experience) can achieve these longer term engagement loops (session-to-session or month-to-month).

For example, in basketball a moment-to-moment goal is to score a point on your possession. A short-term goal is to score more points in the quarter than the opponent. A medium-term goal is to win the game. A long-term goal is to win the season (meta-game progression; progression external to the actual game experience).

A game experience should seek to align a player's goal with an appropriate reward. Good goals allow players to recognize them immediately (E.g., I'm meant to explore area A), while bad goals tend to produce undesirable behavior (I.e., anti-patterns) or simply result in a player being unsure what to do.

Anti-patterns are design choices that tend to be **holistically negative**, such as inducing analysis paralysis (too many choices for the player to make a decision), unclear optimization, fun failing to exceed anti-fun (especially for other players in the game), false choices, expectation breaking, etc.

25 MINUTES

Discussion

Enduring Understanding

- Clear and intuitive goals let players reason about what they're trying to achieve at a given moment and gives meaning to their actions.
- Good goal and subgoal structure gives a game pacing and rhythm that prevents a player from being bored or overwhelmed.
- Good goals create gameplay and are clear and intuitive, while bad goals create undesirable behavior.

Essential Questions

What were the goals and subgoals of the game and why were they important?

- Subgoals are the smaller objectives within the game experience.

  *For example, in soccer, a **subgoal** is to take up position in opposition territory, while the goal is to score.*

  OVERALL GOAL: COMPLETE THE MOST GOALS.

  - **Goal: Get the most points in 5 minutes.**
    Subgoal: Score a point.
  - **Goal: Have the second most points after 5 minutes.**
    Subgoal: If you are 2nd, try to prevent players lower than you from scoring points. If you are lower than 2nd, try to score more points to catch up.
  - **Goal: Score against each player once.**
    Subgoal: Score against a player.
  - **Goal: If a player is scored against, they are out. Last player standing wins.**
    Subgoal: Score against a player.
  - Subgoals provide pacing and give players a sense of progression.
  - Goals can almost always be separated into more subgoals.
    - The goal "complete the most goals" is split into smaller subgoals (get the most points in 5 minutes, have the second most points after 5 minutes, score against each player once, score twice in one turn).
      - "Score against each player once" has the subgoal of scoring against a player. After you have scored against them, you will try to score against another player.
  - Good subgoals allow the player to measure their progress towards a greater goal.
    - In this exercise, each time a player completes a goal, they get one step closer to becoming the champion.
  - Tensions should generally rise as multiple players approach the final goal (complete the most goals).
  - If a game experience lacks subgoals, it makes it difficult for players to understand their progression throughout the game (close to the beginning, middle, end, winning, or losing).

Would a game (E.g., American football) be better or worse without subgoals? Why? Why not?

- In American football, the team with possession has four attempts to move the ball forward ten yards (**subgoal**). If they fail, they turn the ball over to the other team.

  Consider a version of American football without this attempt system and instead, with infinite possessions. Would this be a better game?

  - Generally speaking, no.
  - Subgoals allow for ebbs and flows of intensity.
  - They allow players to gauge their progression throughout the game experience on a smaller and more appreciable time scale.

Which goals were good and why?

- Good goals produce game states that are dynamic and create interaction (gameplay) between players.
  - **Goal: Score against each player once.**
    Players will constantly need to reconsider their position relative to the players they still need to score against and adjust their decision making.
  - **Goal: If a player is scored against, they are out. Last player standing wins.**
    A player may try to knock out another player who is currently winning the championship to slow them down.
- E.g., If Player A is currently winning the championship, but Player B is an easy score, you may consider to try and score against Player A instead.
- Good gameplay occurs when players are able to change their decisions based on the game state.

Which goals were bad and why?

- Goals that are meaningless, frustrating for everyone, or lack gameplay/meaningful decisions are typically bad.
- Goals can be unclear, leading to low satisfaction.
  - **Goal: Win by coming exactly 2nd.**
    - There is no incentive to score with this goal, because as soon as a player scores, everyone else should stop scoring as they will be in 2nd place.
    - Additionally, the goal is unclear. Does 2nd mean equal 2nd or to have sole possession of 2nd? If a player is on 1 point and everyone else is on 0 points, did all of the other players win?
    - This goal is bad because it has unclear optimizations and promotes poor gameplay.

TOTAL TIME: 60 MINUTES

Lesson 2

25 MINUTES

Goals and Pacing

STUDENTS DESIGN NEW GOALS: 15 MINUTES

1. **Students each design two new goal cards (they shouldn't be similar to any goal cards they've played).**
2. **Encourage students to make simple goals with good decision-making.**
3. **Explain to students about working backwards to help them think more abstractly about how to create good decision-making from the beginning.**

WORKING BACKWARDS

- Start the design process by encouraging students to talk about what makes their turn at the game interesting (E.g., good decision-making) and then work backwards from there.

  E.g., An interesting turn is when a player's decision has an impact on another player's decision.

  E.g., An interesting turn is when a player's decision impacts their future turns.
- By having students start with what they want their designs to achieve, they'll find it easier to land on a good goal.
- Students may find that they're stuck in "analysis paralysis" (find it difficult to think abstractly or can't come up with a good idea). Encourage them to take inspiration from some of the existing cards.
- Get them to think about how to alter how players normally think about their turns or other players in the game.

Some examples of goals and how a designer might think about them:

- **Make players think differently about other players:**
  - **Goal: Score against the player who has the football that is 1 number higher than yours.** For this game the number 1 will be "higher" than the number 4.
    Subgoal:
    - Try to stay away from the person who is 1 lower than you.
    - Try to position in a way to have a good shot against the person 1 higher than you.

- **Make players think differently about how they use their turns:**
  - **Goal: Score twice in one turn.**
    Subgoal: Score once.
    - Plan how you will position your football after scoring to score again.
  - **Goal: Hit any player's football, then score against a different player on the next movement.** Players will have to think differently about how they set up scoring opportunities.
    Subgoal: Score against a player. Score against another player.
  - **Goal: Hit each other player's football once.** Players will need to plan their turns cleverly. This goal may be too difficult!
    Subgoal: Hit a football.

4. **Of the two new goals, have each student select their best one based on their evaluation criteria.**
   Students should create their own design evaluation criteria and record it in their journals.

STUDENTS PLAYTEST WITH NEW GOAL: 20 MINUTES

5. **Students playtest with the new goal as per the previous lesson. Each student should be able to play a round with the goal they designed.**

Teacher's Context

5 MINUTE READ

Designs are typically evaluated on several axes:

01 **Innovation**
Is the card unique? Would this delight a player?

02 **Depth (Gameplay)**
Does the goal have good gameplay?

Does it promote strong decision-making? Can it cause players to consider their decisions with respect to other players?

03 **Complexity**
Is the goal simple and does it have gameplay depth (many situations can arise)?

Ideally, a goal should be as simple as possible, while being as deep as possible.

04 **Cohesion** *(Not relevant for this specific activity)*
How well do the thematic, narrative, type of fun, and mechanics work together to produce a high quality design?

05 **Satisfaction**
Was the goal fun? The goal may have good depth, but sometimes not be fun (especially if it's complex). Did it result in actions that were satisfying?

What kinds of fun did the card appeal to? Goals that explicitly target certain types of fun are likely to produce high satisfaction for players who like that kind of fun. A goal which encourages players to plan their turn, such as "gain a point by touching each other player's football once," may be particularly resonant with a player who enjoys the "challenge" type of fun.

15 MINUTES

Design Evaluation

DESIGN EVALUATION: 10 MINUTES

1. **Students evaluate whether the goal they chose was well designed and state reasons why/why not.**
2. **After students have evaluated their goals using their own method, explain each of the common design evaluation categories noted above.**
   It could be helpful for students to note these criteria in their journals as they'll be using them extensively in later modules.
3. **Students rate the quality of each of their designs using the new framework (1-5 rating with reasoning).**

GOAL AMENDMENT: 5 MINUTES

4. **Students are allowed to make amendments to their goal (including re-designing it) after they've been exposed to the new criteria.**

10 MINUTES

Discussion

Enduring Understanding

- Good goals create gameplay and are clear and intuitive, while bad goals create undesirable behavior.
- Have several students share their goal with the class and a unique challenge they faced.

Essential Questions

What problems were there in coming up with an interesting goal?

- Thinking abstractly about a problem is a concept worth digging into as students will likely not have had much exposure to thinking abstractly about design.
- Until now, many concepts are either right or wrong. Here, the student has to reason about what an interesting turn is, what a decision is and make a **subjective** evaluation of their design.
- Designers commonly make **frameworks** to evaluate tradeoffs (known pros and cons) for design decisions based on audiences that they're trying to serve.

  E.g., Is the complexity of this design worth the depth? Is the increase in fun for one type of player worth the reduction in fun for another type of player?
- It's very common for designers to disagree on the holistic evaluation of a design.

What qualities made the goal good or bad?

- Similar to the goal evaluation in the previous lesson, but with more emphasis on how students went about designing good goals and avoiding designing bad ones.
- How did the students decide which of their two goals was the better design?
- Could the students identify what a good goal and a bad goal was?
- Does good and bad design exist?
  - Objectively bad design exists and is a design that typically doesn't serve any audience.
  - A good design can still be niche and serve a small audience, while being unpopular to a larger audience.

Homework

Game Design Framework Worksheet

1. Students are to fill out what they learned from the goals portion and important takeaways (at least 3).
   - The focus should be on how these learnings apply to games generally or to the game they will create in the final module.
   - The responses should be open ended.

Goal Card Design Evaluation

1. Explain why the goal they chose as their best as the best goal they designed. (~200 words)
2. Encourage students to evaluate their designs through both **their own method** and **the provided design framework**.
3. Students should reflect on whether the new framework helped or hindered their design process and why (and whether they made any adjustments based off of it).