# Gameplay & Theme

Concept #1

15-03-25

## What is covered in this document?

- All information related to the theme and gameplay for Concept #1
  - Background on Gameplay
    - Overarching Story: Constraints and Idea
    - How Does Gameplay Work?
  - Gameplay Options
    - Our Core Mechanic
    - Secondary Mechanics
    - Cross-Age Mechanics
  - Game Structure and Game Structure Options
    - Overall Game Structure
    - Unified Structure
    - Divided Structure
    - Grade per Core Mechanic
  - Other Game Elements
    - Rewards
    - Objectives
  - Game Structure
  - Examples of Cross-Age challenge (TBD)
- This document aims to stay as high-level as possible.
  - We aim to tackle ideas and see how they fit together.
  - The goal here is to open doors on ideas, discussions, and decisions, rather than proposing a fully fleshed-out concept.
  - For this reason, this document is still high-level.

# Overarching Story – Constraints

- Because the game is divided into multiple levels, each containing a short story (the core mechanic), the overarching story has to be flexible.
- Each level should bring something new to the game world and its overarching story.
- The story needs to be divided into different "volumes", as players from age 5 to 11 will be playing it. The maturity of the story needs to evolve as the player progress in it.
  - Hence the need to know how we divide the game (One game with its own storyline per grade? One huge game across all grades?)
- To work with CA game concept #1 (Reader Leader), the main theme of the overarching story has to be "dystopian."
  - However, as we are targeting younger kids, we need to be careful with the boundaries of this theme.
  - Also, our core mechanic and the word lists constrain us to set a fantasy tone to the world (as we need both inanimate objects and animals to speak or communicate with the player.
  - These constraints shouldn't affect us much, as some contemporary mainstream stories with talking animals and fantasy worlds appeal across generations (Dreamworks, Disney, LEGO, Pokemon, etc.)
- We also need to justify certain elements through our story:
  - Why can the main character and his close allies talk at the start, but not the rest of the world?
  - Why does the character have the ability to save the day, what makes him so special?
  - How can the character talk to animals and objects?
  - What was the world before the cataclysm like?
  - What caused the old world to collapse?
  - Is the cataclysm ongoing in the character's days?
  - Is every student going to save the world alone, or are they conscious that they are all doing their own part in a common world?

## Overarching Story – Idea

Given the constraints mentioned above, the following idea would be a viable path:

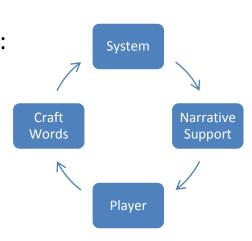
- A long time ago, all living things were able to speak English. This capacity to communicate let them live in peace, as they were able to help one another. This is the Past Days.
  - This Past Days is set in a full-fantasy setting, where men, animals, knights, talking trees, dragons, robots, pirates and space ships can co-exist. It is a utopian world where anything is possible. As it is taught to K kids, the world of Past Days is a Dr. Seuss story. The story of Past Days may be retold in a more complex form as the kids get older: the story stays the same, it's just the way it's told that gets more mature.
- However, one day, some words were forgotten in a cataclysm called "The Big Silence." From that moment, beings stopped talking to each other and turned into stone.
  - Some evil sorcerer or monster is probably responsible for this.
  - This led the world to be a chaotic place, where every creature has been turned into mute stone, except for a few groups of surviving "Speakers."
  - The world become a kind of stone forest. Nothing really scary at the start, although we want the world to be mature and dark as the player progress in his
    journey (as he gets older).
  - Having stone statues will help the player differentiate between inactive characters/decoration and active characters.
- The Speakers, who manage to learn a few words, try to survive and harness the power of words, by spreading the knowledge of words and returning the stones statues to life and speech.
  - One named, stone statues return to life and can be interacted with.
  - They have great power, as they can speak to whoever they want and learn whatever they need.
  - We probably want the survivors to look primitive/tribal as they live in a forest.
- They wander the world, finding more words and helping other people learn the words. They also want to find out why all of this happened and how it can be stopped.
- If we have a 1 game per grade structure, each grade would have this kind of overarching story:
  - GK Learn the story of the Past Days, from an elder Speaker, and fill in or correct the parts he has forgotten
  - G1 Learn the first few words and explore the Silent World
  - G2 Save characters from silence and learn more about the Past Days
  - G3 Help your village to learn about the Big Silence
  - G4 Explore the limits of the Silent World and find who is responsible for the Big Silence
  - G5 Confront the nemesis at the heart of the Big Silence

# How does gameplay work?

- Note: Again, there is no clear/exact/final definition, as every designers has his/her own approach.
- As discussed in the previous document, gameplay is...
  - Something that creates behavior
  - Something that provokes reactions
- Each mechanic in a gameplay has at least one objective.
  - Otherwise, the mechanic is meaningless and the player will have no reason at all to interact with it.
  - The goal should provide a reward, either intrinsic or extrinsic.
- Each mechanic provides a reward, in some way.
  - It can be an intrinsic reward: Interacting with the mechanic itself is rewarding in its own way (for example, the satisfaction of organizing something, getting fireworks as congratulation, increasing speed, besting an opponent, etc.).
  - It can be an extrinsic reward: The interaction provides a reward that is used somewhere else (for example, working for money, helping someone for your own interest, playing for a higher score, lottery, aiming for a goal, etc.).
  - The reward should have a purpose in the rest of the game, especially if the objective of the mechanic doesn't.

## Our Core Mechanic

- At the moment, we can summarize our core mechanic like this:
  - The Player encounters an interactive element with a narrative support
  - The Player has a letter rack, with a certain amount of letters
  - The Player has to mix together letters to form words
  - According to the narrative support, some crafted words may influence the interactive element
- This mechanic is the key part of the gameplay, which is the key part of the game.
- Questions we explore in the following slides include:
  - How do we reward the Player for crafting words?
  - How should we drive the Player to craft words?
  - How should we balance the challenge difficulty with Player age?
  - Should we let the player replay a challenge, and to what purpose?
  - How do we help struggling players?
  - How should we "punish" incorrect players? (Or should we?)
  - How can we wrap up everything together?



# **Secondary Mechanics**

There are a lot of secondary mechanics we could add to our gameplay. These should be added to the game as the player ages, since they require skills that aren't necessary acquired at a young age.

### Timer

Certain encounters could have challenges, where the player builds a word within a time limit. The timer running out doesn't necessary mean an automatic failure; it could just be a way to add urgency or remove bonuses. However, we need to be careful with timer, as it can make challenges more stressful.

### Hangman Challenge

Some challenges could let the player only be able to build a single answer. The player would have to figure out the right word from the correctly guessed letters.

### Durability Challenge

Some challenges could require the player to build as many words as possible from his letter rack (target words or other words, pre-taught words or new words). Once enough words are crafted, the player would have access to the target words and would be able to continue the usual progression through the mechanic.

### Non-target words

Words that were not targeted by the designed interactive objects (for example, if a second grader manages to craft the word ferocious in a lesson about long vowels) have to be rewarded, even if they are a lucky shot. Without having a direct effect on the level, those words could help player beat timers, or give other bonuses.

### Shuffling Tool

- The user could have a way to shuffle the letters (in the same way Scrabble does). We could go a step ahead and shuffle the letters following certain criteria (matching roots, matching syllables, matching OW sounds, etc.) If the criteria are chosen randomly, it becomes a sort of "smart" shuffling/hint system.

### Decisions & Outcomes

If we divide the levels into short stories (bound together by different narrative elements), we could manage a lot of different outcomes and create different
decision moments, requiring the player to foresee/plan out his actions and eventually replay the level to find all the outcomes.

### Complex Movement

 Instead of just letting the player explore a room, we could let him discover multiple environment per level, each requiring him to do specific actions in a specific order to access (or block) them. Outcomes would then depend on where the player goes, along with how he interacts with other elements.

### Resources to scavenge/manage

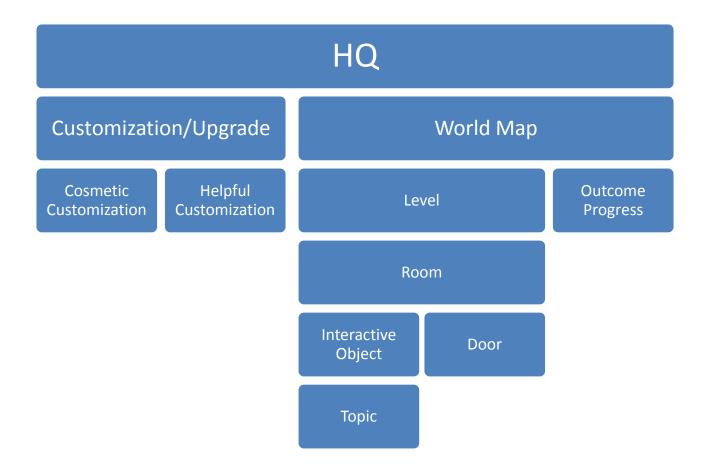
Scattered into the different levels could be limited resources to be discovered (once found, the resource is gone). As the player progress, he will need more
of those resources to progress, requiring him to revisit earlier levels in order to find them all.

# Cross-Age Secondary Mechanics

- From these secondary mechanics, we can enhance our core mechanic, according to the player's age.
  - These gradations do not take into account the Skill the player is in, they are only linked to the player's age.
- The secondary mechanics are much more flexible than the core mechanic, which makes it easier for us to bind them to Player age and apply them differently to any particular skill.
  - A 11 year-old player would have a challenge suitable for his age, based on adapting the secondary mechanics. These secondary mechanics would be available even if the student is working at an earlier skill level, for example a skill from Grade 2 of the scope and sequence.
- Unlike the secondary mechanics, the Skill Level is not bound to the player age, but to the game level.
  - This is done because each level has its own story, and our mechanic heavily depends on the short stories we aim to develop.

The complexity of the game adjusts up for students age. The skill content remains constant, following the student's own mastery of the Foundation Skills (which are bound to game levels). Complexity of Gameplay

### **Overall Game Structure**



A summary of each element is available on the next slide.

## **Overall Game Structure**

### HQ

The player's home base. It is where the player upgrades and customizes his character (and home base). According to the outcomes the player unlocks, different characters, props or buildings could be added to this location. We need to limit time spent in this area by reducing its interest or adding a mechanic that requires the player to play with the Foundational Skills.

### Customization/Upgrade

Personalize both the character and the HQ with cosmetic modification. It helps the player identify with his character. This customization will mainly be used to let the student showcase where he rocks, by giving him customization elements that show what he is good at.

### World Map

A large world map where every level is marked as a possible destination. The player can see the path between level, s and can also see where each lesson is covered. Each level also shows how many outcomes they have.

### Outcome Progress

For each level marked on the world map, each outcome is marked as either discovered, locked, or completed. Outcomes that aren't discovered are accompanied by a riddle that hints at where the missing requirement could be found (it could either be a customization, another past outcome or an upgrade).

### Level

- A set of rooms where a precise short story happens. According to where the player goes and what he does, the story can end in different outcomes. Levels can be set anywhere (indoor, outdoor, underground, etc.), as long as it fits with the overarching story.

#### Room

A room contains a door to leave it (if there's more than one room in the level) and at least one interactive object. A room is more of a location visible by the player, rather than a physical room.

#### Door

A door leads the player from a room to another room. They can be "locked", if the player hasn't met certain conditions.

### Interactive Object

- The main element of the core mechanic. The player has to interact with it in order to progress in the game. Certain objects can be "disabled" if the player hasn't met certain conditions.

### Topic

Once named, each object contains different topics that require the player to explore them by crafting words from the letters of his letter rack.

# Unified Structure: 1 Game for All Grades

- In the "one unified game" idea, each school year would provide the student new secondary mechanics.
  - Player Age 5-6 The player has access to the core mechanic without any secondary mechanic, as he
    or she is too young to being able to respond to those.
  - Player Age 6-7 The player has access to some different, easy to reach outcomes. The navigation in the levels also gets more complex. A basic shuffling tool is made available.
  - Player Age 7-8 Non-target words are rewarded, as the player gains access to a greater variety of words.
  - Player Age 8-9 Hangman challenges are available, along with a more complex shuffling tool.
  - Player Age 9-10 Durability challenges, along with more complex outcomes, appear.
  - Player Age 10-11 Resources are scattered in the levels and upgrades are available.
- Once applied, a mechanic is used all years following
  - For example, the Hangman challenges is presented at age 8-9, but players of age 10 and 11 still have to face them in their own challenges.
  - Older players require more complexity, whatever their acquisition of Foundation skills.
- These age-assigned mechanics are to be seen as an example.
  - Since we haven't fully reviewed the player's capacity at each grade, they are probably not representative of the real skill of each age group.

# Divided Structure: 1 Game per Grade Band

- A "1 game per grade band" idea would require more core mechanics. Those mechanics would be clamped together so one influences another.
  - Each core mechanic would need the player's mastery of the Foundation Skills.
  - Player Age 5-7 Exploring the world using the current Way with Words mechanic
  - Player Age 7-9 Harvesting/crafting mechanic that requires the player to separate preassembled words in order to craft new ones
  - Player Age 9-11 Build and manage a village using words to communicate with and command villagers.
  - In this example, the first two years players would only explore the world; as players age they do the other tasks.
  - Once applied, a core mechanic is used all years following.
- These age-assigned mechanics are to be seen as an example.
  - Since we haven't fully reviewed the player's capacity at each grade, they are probably not representative of the real skill of each age group.
- Along with the new core mechanics, secondary mechanics would be evolving across each year.
  - Player age 8 would be able to harvest and craft, but would also have to handle the secondary mechanics from the previously learned core mechanic.
  - Adding complexity to the first core mechanic, in addition to integrating new mechanics, both increase the interest of the "known" gameplay, in addition to adding content and depth to the overall game.

## Grade Per Mechanic

This approach has an interesting advantage in that we can align different skill sets with different core mechanics.

- We may decide that:
  - Grade K and 1 lessons are much more interesting for a crafting/harvesting mechanic,
  - Grade 2-3 and more adapted to an exploration mechanic,
  - Grade 4-5 would fit best a community-based mechanic.
- That way, the lessons mostly stay the same through the whole game.
  - For example, the word "rat" is always bound to a rat found in exploration. The word "community" is only tackled when the player is old enough to manage a community. All that changes is the context where the 10-year-old has to face the word "rat" during his exploration.
- This approach is valid for both structures (Unified or Divided).
  - Unified: If all mechanics are interconnected, the location the 11 years old needs to visit to find the rat would be the same as he visited when he was 5 years old.
  - Divided: Content will need to be revisited, but will be much more closer to the player's interest and overarching story.
- Using the Divided path, there could also be a way to create « employment », as higher-skill players that need to manage a village require lower skill players to explore and craft simpler words for them.
  - This idea has the advantage of letting the class work together toward a common goal (the classroom's village). It also promotes
    communication within the game (as everyone has a village to express themselves in) and outside the game (all players should do their part of
    the game for everyone to benefit from).
  - However, this idea has the disadvantage of making it more obvious that some players have lower skill levels than other.
- It also has an ethical issue, as lower skill players work for higher skill players, even if both players work toward a common goal (the classroom's village).
  - This may give the feeling that lower skills are "only good for harvesting", as higher skills have the potential to "manage and control others".
  - If handled well, this could empower lower skills are they are the foundation of the micro-society the players are working in.
  - If not handed well, this would create a huge demotivational factor, along with real-life discrimination.

## Rewards

Different rewards appear as the player gets older. Most of them encourage the player to repeatedly play a sequence, as they all required different conditions that can be only achieved by playing a level multiple times.

### Direct completion feedback

Completed levels must be achieved and celebrated clearly, as it is the most frequent feedback the player will be looking at. Completed words should be rewarded in just the same way.

### Encountered words recap

 All words encountered in a level must be recapitulated at the end of it. Giving a simple definition for each word would be quite enough for the student to have a good overview of what he encountered and spelled.

### Star System

 While outcomes and decisions shouldn't be graded in quality (like the usual 3-Star System), it is very important to celebrate when a new outcome has been found.

### Customization

 As the player completes levels and find different outcomes to each of them, he unlocks different customization for his own character and his HQ. This customization should be used to let the player express what he is good at.

### Scoring

 Depending on the amount of non-target words found, the time taken to find a word, and the outcome, scoring would be a possible solution to reward the player. As with the timer idea, we need to be careful to expose only successful players to scoring, as it can be as negative as it is rewarding.

### Upgrade

 Using the resources scattered in the levels, the player can purchase different upgrades, such as new tools, new items to create additional outcomes and abilities that ease the different challenges (more time, more guesses, fewer words to craft on durability challenges).

# Objectives

As the player overcomes challenges and finds different outcomes in each level, he progresses in different aspects of the game.

These are all different ways to promote repeating play, as all those mechanics require the player to repeat levels in order to refine his skill, explore all possibilities, or accumulate something.

### Overall Progress

Seeing the level advancement from the world map is both a good progress indicator and a motivator to continue.

### Completed Outcomes

For each level, the player should be able to see how many outcomes are possible, along with which of them is locked and how to unlock them. Completed outcomes should be notified and a total should be calculated. As references, the game Mario 64 had a very similar way to progress, where the player had to find and collect every star and coins of a level, through multiple sessions, in order to fully complete it.

### Words Found

The amount of different words crafted (both target and non-target) should be written, along with simple descriptions of those words. We could also use this
dictionary to explain in which level each word has been used, to help the player backtrack to find more possible outcomes.

### Leaderboard

Local leaderboard or specialized leaderboards (specific age and grade) should be displayed, along with hints on how to improve through it. This kind of reward should be given to above-grade players that wants to compete against other above-grade players, as it can cause trouble for students below average.

### Customization Unlocked

In addition to rewarding player with customization, showing how many customization pieces remain to be unlocked is a good way to let him find all hidden pieces, in addition to proposing ways the player can better himself (as the customization is a way to show the world what the player is good at).

### Resources Found

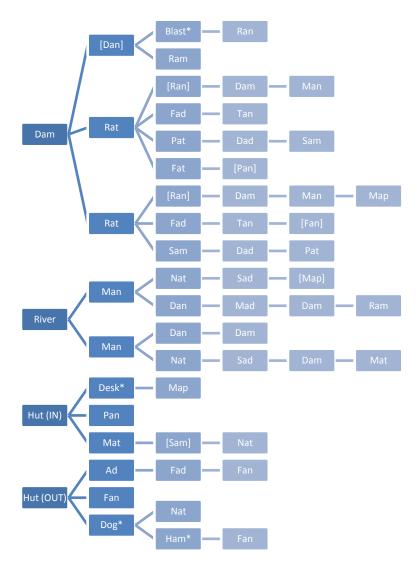
The number of resources found in each level is a good way to see how close to completion each level is.

### Upgrades Purchased

Same as customization, the player should have a way to upgrade all elements, by finding all hidden resources.

# Example 1 for Older Students

- The first example uses Grade K skills (lessons 11 an 12) with a 10-year-old student.
- It is composed of three interconnected rooms:
  - A Dam
  - A River
  - A House
- Some of the elements present in the level require knowledge earned later to be available:
  - Dog, Ham, Desk, and Blast
- The player can enter the level from a path near the hut. He can complete it by crossing the river.



# Example 1 for Older Students

- By visiting the different rooms, the player encounters different characters and objects:
  - Two rats on the dam (a small rat-made, wooden dam). One is a fat rat named Pat, the other is named Sam, and is Pat's son. They tell us about the latest fads for rats: getting a tan, using a cooling fan, and the latest in cooking pans. Both Pat and Sam want tans, Sam wants a fan, and Pat would like a pan. They can be told to run [HFW] away, if the player learns Dan's intention. If both get what they want (pan and fan), they will let both the player and Nat pass over the dam.
  - Two men, one on each side of the river. One is named Dan and wants to ram (or blast, if the word is known) the dam for Nat to pass. If presented a map, he will cross the river to save his friend. On the other side of the river, there's a man named Nat who is sad, for he wants to take a nap at the hut, although he can't due to the dam.
  - At the hut, Nat's dog (namable if found later) wants a ham (also namable if found later), he can trade one for its fan. Beside, an ad saying that fans are a fad. The fan can be stolen by sneaking around the hut.
  - In the hut, the player can find a pan, a mat and a desk (namable if found later). The desk contains a map. If the dam is rammed (or blown with a blast), or the map given to Dan, Nat can take his nap on the mat.

## Example 1 for Older Students

- Different secondary mechanics could be used in this level:
  - The level have multiple outcomes, as the player can decide a different fate for the dam and the rats. He can also decide how Nat can cross the river and how the dam breaks.
  - At all times, non-target words can be rewarded.
  - Hangman challenge could be used to find how Nat is feeling (Sad) or to know what the rats think is a fad
    (Tan). The dog could also trick the player to find what he wants to eat (Ham) or to guess what's in the desk
    (Map).
  - Dan could wonder what to do with the dam, requiring the player to find a quantity of non-target words (having the word Ram on the tip-of-the-tongue), in a Durability Challenge. The player could also name different things that are fads, so that Sam the rat can ask for a Fan.
  - The Run [HFW] topic for both Dan and the rats could be done with a Timer challenge, requiring the player to find the word before the dam blows up.
  - Complex movement (requiring different simple interactions) could be used to steal the Fan from the dog.
  - Resources could be hidden at different places across the level, requiring the player to visit each outcome in order to get them (on the other side of the river, protected by the dog, behind the two rats, at the bottom of the river, etc.).

## Example 2 for Older Students

- This second example uses Grade 5 Skill (lesson 64) with a 10-year-old student.
- It is a short and intense level, where the player hasto fight a robot. Instead of being based on locations and objects, it's based on events and time.
- It is composed on a single room; an old factory overrun with plants.
- It doesn't require any other elements from past or future levels, although it could be possible to enhance the level with different objects, characters, and rooms.
- The player starts the level by activating/encountering the monster. It ends when the enemy is defeated.



## Example 2 for Older Students

- During the encounter, the enemy says different sentences that would lead the player on certain path. Below are some examples of sentences said by the monster:
- At encounter:
  - "A strange mechanical contraption stands before you. Even unanimated, it glimmers with madness." -MACHINERY
- Once Machinery is named:
  - "Who dares to defy me, the Great Robot Lord?" –FEROCIOUS, COURAGEOUS
- If Ferocious is said:
  - "None can pierce my metal armor! Not even these razor-sharp leaves." –VICIOUS
- If Vicious is said:
  - "I will crush your world, puny human! What can your trees do against my mechanical saws?" -LUSCIOUS, PRECIOUS
- If Luscious is said:
  - "So many plants! They are polluting my oil!" -INFECTIOUS
- If Courageous is said:
  - "Being heroic brings you nothing, human! Behold my super secret weapon!" –SUSPICIOUS
- If Dangerous is said:
  - "Ah! You broke my engine! What I am going to do?" –VICTORIOUS

## Example 2 for Older Students

- Different secondary mechanics are used in this level:
  - As soon as the machinery is activated, each of the challenges the player faces during the encounter requires the player to find one of the target words before the time is over.
     The timer restarts every time one of the right words is found.
  - During this encounter, the player can craft non-target words at any time. These words will not penalize the player, but rather give him bonus time to find the right word.
  - The last part of each branch could require the player to craft a few words in a Durability Challenge before giving the opportunity to craft the final words (either INFECTIOUS, CAUTIOUS, VICTORIOUS, or UNCONSCIOUS).
  - This "high skill level" challenge does not require the player to use the available time to find the target words, it rather requires him to build as many words as he can, within the time constraint. The player can only fail by not building words.
  - Five outcomes are possible: INFECTIOUS makes the plants overrun the robot. CAUTIOUS makes the robot surrender to the plants. VICTORIOUS makes the player destroy the robot heroically. UNCONSCIOUS knocks down the robot. Failing the time limit knocks down the player character, failing the level.