

Project 2

Can gameplay aid structural understanding of language?

Facilitating English language learning.

Under the guidance of
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IIT Bombay.



Approval sheet

The Visual Communication
Project 2

Titled: "Can gameplay aid structural understanding of language?"

Facilitating English language learning" by Salik Ansari, roll no 156250001 is approved, in partial fulfillment of the requirements for the degree of Master of design in Visual Communication.

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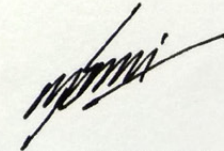
Declaration

I declare that this submission represents my ideas in my own words and where other's ideas or words have been included, I have adequately cited and referenced the original sources.

I also declare that I have adhered to all the principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/ fact/ source in my submission.

I understand that any violation of the above will be cause for disciplinary action by the institute and can also evoke penal action from the sources which have, thus not been properly cited or from whom proper permission has not been taken where needed.

Signature



Salik Ansari 156250001

Date: 23 | 11 | 2016

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Grammangal, Aina:

My sincerest gratitude goes to teachers and students at Grammangal, Aina Dahanu.

Project:

This project 'can gameplay aid structural understanding of language? has enriched 'English' area of my being :)

Tata Centre
Technology and Design, IIT Bombay

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Content

1. Abstract	1
2. Need	2
3. Motivation	3
4. Problem summary	4
5. Secondary Data	6
6. About Grammangal(primary data)	9
7. Introduction	10
8. Generating content for the game	12
9. Sample sentences used in the content	13
10. Gameplay	15
11. Testing - Game prototype 1	23
12. Findings from testing	27
13. Testing - Game prototype 2	29
14. Transformation: Chart to card	30
15. Final game assets	34
16. Game Prototype 3(Final)	35
17. How to play Observation	36
18. Conclusion	37
19. Biblography	38

1. Abstract

The project aims at facilitating English language learning in resource constrained environments. It aims at making the language more familiar where it is largely alien and enables an engagement with it outside the 'English classroom'.

One of the key ideas chosen in this project is to improve engagement through games that reflect and are sensitive to the socio-cultural and geographical landscape of the said environment. Expanding the current ongoing project LETS (Learn English Through Stories) through a different approach, and making grammar learning intuitive and fun is the main focus of this project.

2. Need

The need of the project was articulated by Shyam Lal Ji a teacher in a school in the district of Kullu during the visit of Professor Alka during her doctoral research years ago. Shyam Lal Ji continues to be LETS' primary contact, and the other was Kapil Yogi who was engaged in helping educated young men and women find means of livelihood other than farming (which is the primary occupation in these hills) without having to migrate to towns like Chandigarh and Delhi. He felt strongly that these young people should have an option to live and work in the hills and valleys where they'd grown up, and yet be able to participate in the larger, more cosmopolitan worlds represented by cities.

3. Motivation

Need:

The need for assistance in English language learning came from the field itself. Educators from G.S.S Khun, Himachal as well as Grammangal , Aina, Dahanu both, felt the need for the language to be taught or engaged with in more effective ways.

Khun:

In the remote hill villages of Himachal Pradesh there is a great need for connectivity with the country as well as the wider world. In these villages at 8- and 9- and 10,000 feet above sea level, small clusters of homes and families cling to difficult terrain and arduous life-styles, with limited access to news or communication, travel or interaction. Development hasn't reached in a big way in these places. Most people move to states like Punjab and Haryana in search of work.

Grammangal:

Aina, Dahanu: Access to Dahanu is limited. A train journey from Mumbai to Dahanu Road, followed by shared tempo rides is the way to reach Aina. Farming and brick making among other things are the most commonly practiced professions among people here.

The people of this area have limited access to the larger world. Malhar Kudi, Warli and Katkari are some of the languages spoken here, languages that have a very limited radius. As with Khun, there is very little in their environment, that gives them access to the larger world. Close proximity to towns allow for alternate careers but it doesn't inspire or drive them to do things differently, or inspire ambition.

To know a language is being able to explore and to have power to imagine alternative possibilities of working with and within a community of thinkers, creators and educators.

4. Problem summary

Problem:

Information and the facility to effect change and make informed decisions on the kind of development needed for their environment isn't available. There is nothing in the environment of this culturally rich state that prepares young men and women for admittance – for communication and interchange with the world outside their own geography.

They speak Hindi and Pahari (various dialects that change every 10 to 25 kms), and they learn by rote the lessons of English grammar and vocabulary that are needed to pass an exam. Creating and modifying livelihoods in the changing globalised landscape is made harder when they are isolated from the world. This poor connectivity with the world can be bridged via the world wide web. Not only in ways of information access but also interaction- interaction with a community of creators, thinkers and doers. Internet offers them admission into this community and the possibility of growth through interaction and exchange of ideas, opinions, plans and designs. Internet bridges geographical remoteness.

But the world wide web, diverse as it is, still largely (over two-thirds of the available material) speaks to us in English. And hence the need to learn the language. Access to internet allows people to imagine alternative futures without having to give in to alternative geographies.

In the Indian context where 150 million people speak the language. It is is very important to tap into job opportunities which require a working knowledge of English as well as to simply find out about things. Internet allows one to speak to the world. To work with and within it.

There is, however, enough in their environment to enrich and to cultivate ideas worth sharing, problems that need solution.

LETS: This project is part of an ongoing live project at the Tata Center for Technology and Design namely LETS (Learn English through Stories) under the guidance of Prof. Alka Hingorani.

1. Problems in the curriculum: The curriculum taught via NCERT books or state board books is not contextualised to the socio-economical and historical culture of the place and is not mindful of its geography. When context and language are both alien the gap between student and language increases.

English curriculum has Shakespeare and Wordsworth. Writings by native authors or authors that write about the region. (Lack of relatability with the subject matter) is absent. The content does not address the struggles and concerns of its audience, thus lacking empathy.

2. Teachers themselves have low confidence and facility with language. They often use the native language to teach English, using a 'translative approach'. While it helps students to use the structure of the familiar language to peg the new one, it is fraught with several problems. This translative approach is not done with conscious thought given to pedagogy. Furthermore languages such as Hindi and English are different in several ways. English is phonemic, meaning that the pronunciation of a word isn't always the same as the spelling.

In spite of the drawbacks of this method it exhibits the "power of the familiar", allowing students a framework on which they can peg and find similarities as well as dissimilarities. The lower confidence and unfamiliarity with the language calls for an incidental teaching of teachers as well.

3. English language is alien: In an environment where the language isn't encountered at home, spoken at school, heard on media platforms or seen on signage, the language appears more alien. It becomes difficult to 'surround' or 'immerse' the student in it. There is no audio-visual input either.

4. Students aren't part of the process of education, something that isn't specific to resource constrained environments but an overall malaise of the education system. When students are more involved in the act of learning, ownership and acceptance, desire to learn increases.

5. Secondary Data.

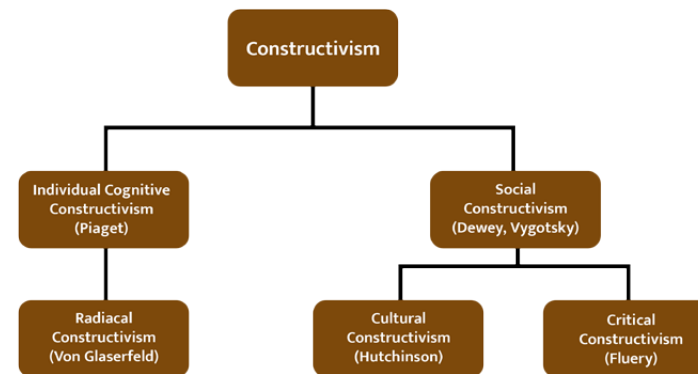
Constructivism is a theory that argues that humans generate knowledge and meaning from an interaction between their experiences and their ideas. There are two major types of constructivism, 1) Individual Cognitive Constructivism 2) Social Constructivism.

Individual Cognitive Constructivism proposes that humans cannot be “given” information which they immediately understand and use. Instead, humans must “construct” their own knowledge.

Social constructivism says that human development is socially situated and knowledge is constructed through interaction with others.

Social Constructivism lays emphasis on the importance of the culture and context in which this learning happens. When children learn concepts in their context and culture they are able to apply these concepts more readily.

In social constructivism it is important to take into account the background and culture of the learner throughout the learning process.



“Languages are socially constructed phenomenon, it becomes very important that the learning of a new language should happen in groups or communities.”

Apples to Apples

To play Apples to Apples, every player except one “judge” puts a card down face-down that is best described by a special card on the table. The judge turns the cards over and chooses the best card. Whoever placed that card down wins a point, and someone else gets to be the judge in the next turn.

It is a very fun game that is also very funny, since the card combinations can sometimes be ridiculous. A card like “Loveable” might end up with results like “Butterflies” or “My Bathroom.”



Image source:

https://images-na.ssl-images-amazon.com/images/I/81INkeSApIL._SL1500_.jpg

Reference

<http://www.fluentu.com/english/blog/board-games-to-learn-english/>



Children in Grammangal, Aina, Dahanu, Maharashtra.



6. About Grammangal.

In 1982, renowned educationists, Padmashree Anutai Wagh and Prof. Ramesh Panse established Grammangal (GM) as an NGO in Dabhon in the Dahanu taluka (district of Palghar, Maharashtra). Dahanu being a backward area with predominantly tribal population, Grammangal has been working towards its upliftment with the help of good education. Grammangal concentrates on providing modern education to the children in this region with the strong belief that education empowers and forms the base of upliftment in the society.

Philosophy

Grammangal follows an open ended learning environment where students move from one class to another while the teachers do not. There are specific classes for specific subjects called 'Labs'. The basic methodology is in the belief that every child is a self-motivated self-learner and the role of educational institutions and teachers is to provide children with appropriate environment for intellectual, emotional and physical growth. The walls of the English lab are filled with hand made charts and posters for students' reference which they can revisit.

Some of these charts include subjects of basic grammar like nouns, pronouns, verbs, adjectives etc. Objects being labeled in English seems to be an attempt towards creating an environment where learning of the language can be facilitated and enhanced.

English Lab- Findings from field visit

Apart from following the constructivist philosophy, Grammangal follows a conventional teaching pattern. It involves transfer of knowledge from teachers to students, which is undeniably a tried and tested method knowledge exchange but it becomes a little difficult to implement with foreign languages. For 'foreign language learning,' it is very important to have exchange of words and sentences among students themselves. With the goal of establishing and nurturing an environment where students can exchange knowledge among each other being the challenging part, comes the importance of the 'context', the 'content' and the 'form' in which it is going to be supplemented.

7. Introduction

My quest started with the idea on how structural grammar can be taught to resource-constraint kids having English as their second or third language.

The project aims in experimenting with the format of game and game-plays using context of Dahanu and its region (Grammangal school in Dahanu).

The content of the game is a combination of visual and textual matter which follows a sense of referential similarity from the surrounding of the region.

Further the game attempts to make it fun and engaging enough so that kids from different states of India will be able to play and enjoy it as well.

Using the constraint of excluding the role of a teacher completely as an opportunity while playing a game is the important part of my investigation.

When kids engage among themselves on any subject, the learning part becomes more experiential and if it is an intriguing and enjoyable experience, the possibility of remembering information increases.

As traditional grammar learning becomes boring at times for students and appears very dull, placing grammar as a rule for a game can trigger interest among students and the learning happens intuitively.

“Traditional teaching is concerned with the teacher being the controller of the learning environment. Power and responsibility are held by the teacher and they play the role of instructor (in the form of lectures) and decision maker (in regards to curriculum content and specific outcomes). They regard students as having ‘knowledge holes’ that need to be filled with information. In short, the traditional teacher views that it is the teacher that causes learning to occur (Novak, 1998)”

Reference

http://www.if.ufrgs.br/asr/artigos/Artigo_ID7/v1_n2_a2011.pdf

8. Generating content for the game.

A part of the game content has been borrowed from the story 'Bhooka and the little boy'- a story which LETS has been working on in the form of a story book.

The appearance of Bhooka, a monster has been kept similar in the game as character who eats people and teachers of Grammangal. The character of the little boy has been replaced with the trio of Pinky, Pappu and Rahul who kill Bhooka together. The whole story takes place in the past tense. Further the linearity of the story has been broken by the game-play, keeping the story intact but only to give hints and thus allowing it to be explored differently.

The story cards have been numbered in order to provide the opportunity for players to notice and arrange the cards and see the complete story in the game. The content of present and future tense is a mixture of daily life activities in the village, festivals, rituals and relationships with nature etc. In order to support the text, content has also been illustrated on the cards with the reference of Warli art.

Warli, being heart of folk art of Dahanu and widely rooted in the minds of people, helps to maintain the connectivity of game with their visual culture.

Tenses

Past

Past Simple

Past Continuous

Past Perfect

Past Perfect Continuous

Present

Present Simple

Present Continuous

Present Perfect

Present Perfect Continuous

Future

Future Simple

Future Continuous

Future Perfect

Future Perfect Continuous

Perfect Continuous from all tenses had been removed from the game after testing game 1 due to its complexity.

9. Sample sentences used in the content.

Past Simple:

In Past simple, the action is simply mentioned and understood to have taken place in the past.

- 1) Bhooka, the monster, ate humans.
- 2) Pinky, Pappu and Rahul silently followed Bhooka up to his cave.

Past Continuous:

In Past Continuous, the action was ongoing till a certain time in the past.

- 1) One bright sunny day in Dahanu, Pinky was walking in the farm.
- 2) Bhooka was pickling humans.

Past perfect:

Past perfect is used to express something that happened before another action in the past.

- 1) Bhooka had eaten all the teachers in Grammangal.
- 2) Bhooka had lived in a dark cave called Kaali.

Present simple:

In Present simple, the action is simply mentioned and there is nothing being said about its completeness.

- 1) Pinky eats poha for breakfast.
- 2) Pinky reads well in english, in the class.

Continuous Present tense:

In Present Continuous, the action is on-going/ still going on and hence continuous.

- 1) Maakad, the monkey, is hanging on the tree.
- 2) Birds are flying in the sky.

Perfect present:

In Present Perfect, the action is complete or has ended and hence termed Perfect.

- 1) Pappu has bathed before going to school.
- 2) Pinky has left for her home.

Future simple:

Simple Future is used when we plan or make a decision to do something. Nothing is said about the time in the future.

- 1) Pinky will hide in the big topli.
- 2) Rahul will sing songs for people.

Continuous Future:

The future continuous tense is used to express action at a particular moment in the future. However, the action will not have finished at the moment.

- 1) Pappu will be coming in a bullock cart.
- 2) Pinky will be going to see a rooster fight.

Perfect Future:

Future Perfect expresses action that will occur in the future before another action in the future.

- 1) Rahul will have done with his math homework.
- 2) People of Dahanu will have danced all night long.

	A		B				c							D			
	Ask	Achieve	Bath	Beat	Break	Build	Catch	Celebrate	Chase	Clean	Collect	Come	Cry	Cut	Dance	Do	Draw
Present Simple	Asks	Achieves	Baths	Beats	Breaks	Builds	Catches	Celebrates	Chases	Cleans	Collects	Comes	Cries	Cuts	Dances	Does	Draws
Present Continuous	is/are asking	is/are achieving	is/are bathing	is/are beating	is/are breaking	is/are building	is/are catching	is/are celebrating	is/are chasing	is/are cleaning	is/are collecting	is/are coming	is/are crying	is/are cutting	is/are dancing	is/are doing	is/are drawing
Present Perfect	has/have asked	has/have achieved	has/have bathed	has/have beaten	has/have broken	has/have built	has/have caught	has/have celebrated	has/have chased	has/have cleaned	has/have collected	has/have come	has/have cried	has/have cut	has/have danced	has/have done	has/have drawn
Past Simple	asked	achieved	bathed	beaten	broke	built	caught	celebrated	chased	cleaned	collected	came	cried	cut	danced	done	drawn
Past Continuous	was/were asking	was/were achieving	was/were bathing	was/were beating	was/were breaking	was/were building	was/were catching	was/were celebrating	was/were chasing	was/were cleaning	was/were collecting	was/were coming	was/were crying	was/were cutting	was/were dancing	was/were doing	was/were drawing
Past Perfect	had asked	had achieved	had bathed	had beaten	had broken	had built	had caught	had celebrated	had chased	had cleaned	had collected	had come	had cried	had cut	had danced	had done	had drawn
Future Simple	will ask	will achieve	will bath	will beat	will break	will build	will catch	will celebrate	will chase	will clean	will collect	will come	will cry	will cut	will dance	will do	will draw
Future Continuous	will be asking	will be achieving	will be bathing	will be beating	will be breaking	will be building	will be catching	will be celebrating	will be chasing	will be cleaning	will be collecting	will be coming	will be crying	will be cutting	will be dancing	will be doing	will be drawing
Future Perfect	will have asked	will have achieved	will have bathed	will have beaten	will have broken	will have built	will have caught	will have celebrated	will have chased	will have cleaned	will have collected	will have come	will have cried	will have cut	will have danced	will have done	will have drawn

Verb | Tense reference chart sample.

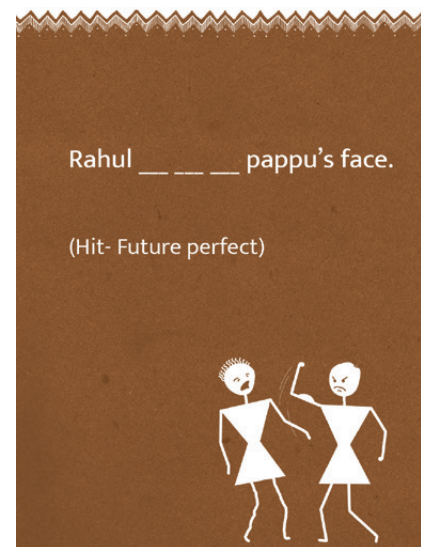
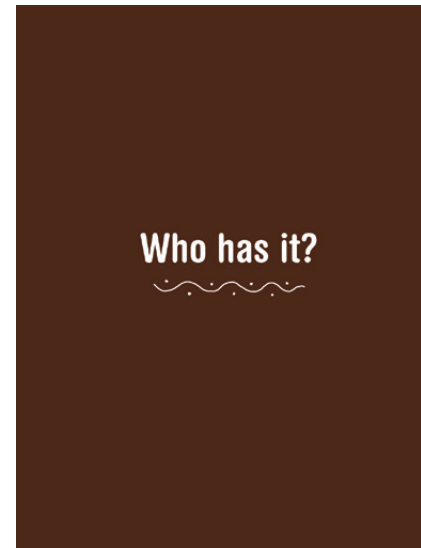
10. Gameplay

Title of the game:

Who has it?

1. A pack of question cards (who has it?) will be stationary and the pack of answer cards will be distributed among players.
2. A verb - Tense reference chart will be given to each players to find the answers.
3. One player will turn one question card in sequencing and the player have to read aloud and all will search for the answer, whoever has the answer card will announce 'I have it' and will submit the card. Submission of the answer card will complete the sentence and its meaning.
4. There are few penalty cards in the pack of question card, on its turning the respective player have to accept any one card from any one of the players.
5. Three to four Power cards which comes in the answer card helps the player either they can submit the power card and don't face penalty or if submitted independently can give one of his/
6. her card to any other player during the game. The player who submits all the cards first will win.

Back



Sample question card

Back



had beaten

Sample answer card

Story used in the card game.

Bhoka monster _____ in the dark cave name Kaali.

(Live- Past perfect)



1

Bhoka monster _____ humans.

(Eat- Past simple)



2

One bright sunny day in Dahanu, Pinky _____ in the farm.

(Walk- past continuous)



3

Pinky saw Bhoka monster _____ humans.

(Pickle- Past continuous)



4

Pinky _____ and told to Rahul and Pappu about Bhoka monster.

(Run- Past simple)



5

Meanwhile, Bhoka monster _____ and drank all the water from the lake.

(Drink- Past continuous)



6

Bhoka monster _____ all the teachers in Grammangal.

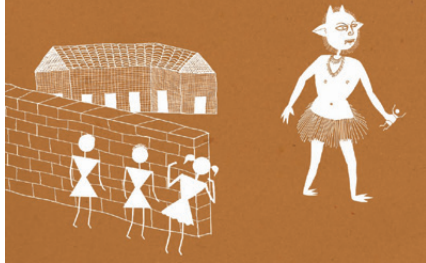
(Eat- Past perfect)



7

When Bhooka _____ from Grammangal, Rahul, Pinky and Pappu _____ behind the wall.

(Leave - Past continuous)
(Hide - Past continuous)



8

Pinky, Pappu and Rahul silently _____ Bhooka monster till his cave.

(Follow- Past simple)



9

Pinky, Pappu and Rahul _____ to the cave where Bhooka was sleeping.

(Reach- Past simple)



10

Pappu _____ Maakad to tease Bhooka monster.

(Ask- Past simple)



11

Bhooka monster _____ Rahul to kill him.

(chase - Past simple)



12

Pink and Pappu _____ the rope and Bhooka _____ on the ground.

(Stretch- Past simple)
(Fall- Past simple)



13

Rahul _____ his shoulders and _____ his arm, and released his axe at monster's neck.

(Straight- Past simple)
(Shoot- Past simple)



14

People of Dahanu _____ all three kids to their shoulders in celebration.

(Take- Past simple)



15

Other cards

Pinky _____ on the wall.

(Draw- Past continuous)



Pinky and Pappu _____ to collect mangoes from the tree.

(Try- Past continuous)



Pinky _____ fireflies in the glass jar.

(Drink- Past perfect)



Pappu _____ cricket.

(Play- Past perfect)



Pappu _____ a huge paper boat.

(Build- Past perfect)



Rahul _____ pappu for teasing him.

(Beat- Past perfect)



Pinky, Pappu and Rahul _____ karate.

(Train- Past perfect continuous)



Pinky, Pappu and Rahul _____ Grammangal.

(Clean- Past perfect continuous)



Pinky _____ on music.

(Dance- Past perfect continuous)



Pinky _____ on music.

(Dance- Past perfect continuous)



Pappu _____ at his friends.

(Shout- Past perfect continuous)



Pinky likes to __ poha for the breakfast.

(Eat- Present simple)



Pinky ___ well in english in the class.

(Read- Present simple)



*Pinky _____ all types of flowers.

(Collect- Present simple)



People of Dahanu likes to _____ holi festival.

(Celebrate- Present simple)



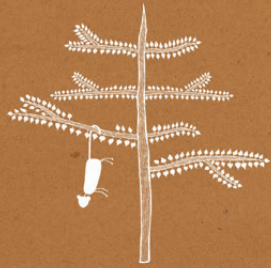
Pappu ___ dholak in Ganpati festival.

(Play- Present simple)



Maakad monkey _____ on the tree.

(Hang- Present continuous)



Pappu _____ the goat.

(Ride- Present continuous)



Pinky _____ on the sack of grass.

(Jump- Present continuous)



Pinky _____ in the classroom.

(Cry- Present continuous)



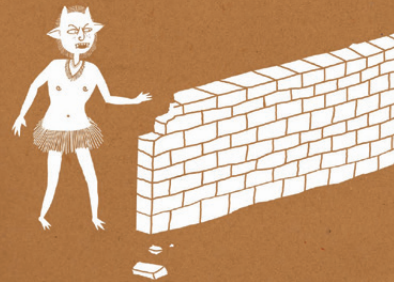
Birds _____ in the sky.

(Fly- Present continuous)



Bhooka monster _____ the wall of Grammangal.

(Break- Present continuous)



Pinky, Pappu and Rahul _____ all the flowers in the air.

(Throw- Present Perfect)



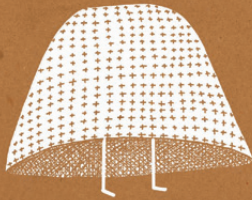
Pappu _____ before going to school.

(Bath- Present Perfect)



Pinky _____ in the big topli.

(Hide- Future simple)



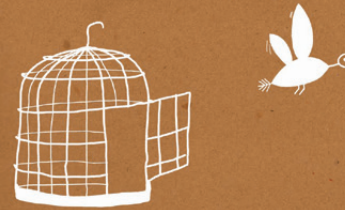
Rahul _____ songs for people.

(Sing- Future simple)



Popat _____ away from the cage.

(Fly- Future simple)



Motu is so fat that if he jumps in the lake he _____.

(Float- Future simple)



Bhooka monster _____ Rahul to kill him.

(Chase- Future simple)



Pappu _____ on bullock cart.

(Come- Future continuous)



Pinky _____ to see a rooster fight.

(Go- Future continuous)



Pinky, Pappu and Rahul _____ plants in the school.

(Grow- Future continuous)



Rahul _____ with his math homework.

(Clean- Future perfect)



Pappu _____ of heavy rain.

(Fear- Future perfect)



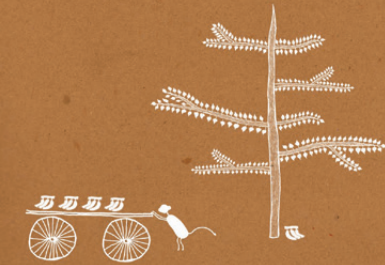
Rahul _____ on pappu's face.

(Hit- Future perfect)



Maakad _____ banana from the thaela.

(Steal- Future perfect)



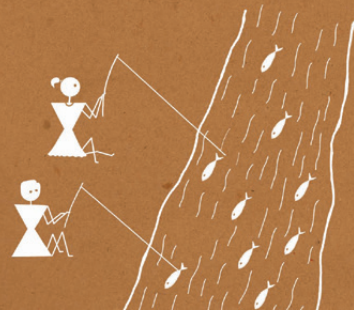
Pappu _____ for an hour before lunch.

(Sleep- Future perfect continuous)



Pinky and Rahul _____ fish for sometime.

(Clean- Future perfect continuous)



People of Dahanu _____ all night long.

(Clean- Future perfect continuous)



Maakad monkey _____ on a tree outside the kaali cave.

(Live- Future perfect continuous)



11. Testing - Game prototype 1

Tested on a group of 4 kids

Ashna 7th std (11 yrs old)

Aarifa 7th std (12 yrs old)

Sahil 5th std (10 yrs old)

Reeba 6th (10 yrs old)

From a local english medium school, Bhiwandi (state board). Kids from 7th grade have been taught about tenses in school where kids from 5th grade were just introduced about it. Kids were given instruction about how to play the game, importance of power cards, penalty cards and use of reference chart were explained.

Testing 1 (3 kids played the first game) Reeba the 4th kid was observing.

A Pack of cards (one and half dozen question card and same amount of answer card)- Included only Past tense (simple, continuous & perfect).

All the answer cards were distributed among kids and the pack of question cards were kept still. A question card have to be picked one at a time in sequencing of the players, then all the players have to check for its answer and submit it, and the game proceeds turn by turn.

Observation

1. Time taken to complete the first game was 11 min.
2. Kids didn't use chart at all.
3. Kids seems enjoying the game

Ashna finished her cards first (she got more correct answer in her set of answers- luck was the factor). Sahil came 2nd after using the power card and Arifa stood last.

Testing 2 (3 kids played the second game) Reeba the 4th kid was still observing.

Same pack of cards (one and half dozen question card and same amount of answer card)- Included only Past tense (Past simple, Past continuous & Past perfect).

No answer and question cards were distributed. A question card have to be picked one at a time in sequencing of the players, then all the players have to check for its answer by picking answer cards one by one.

1. Time taken to complete the game 10 mins. kids didn't used chart again.
2. Aarifa finished first and Sahil came second and Ashna stood last.
3. Sahil didn't knew the meaning of word 'mean while' & 'pickle'.

This gameplay had accelerated their action of picking the answer cards and analyzing it, as the players gets dependent upon who will pick the correct one and how fast they can analyse the answer and then pick again.

Kids have played UNO before, previous knowledge helped them in playing.

Asking question exercise

After playing the game two times, kids were shown question cards only one at a time and they were asked its answer, 15 out of 18 answer came out correct.

They faced problem with following words :

Live - Leave (confusion as it seems similar)

Pickle and Meanwhile - as they didn't knew the meaning of the word. Also there was confusion between has, have & had - was and were.

Pattern understanding needs to be establish what attributes to use in particular type of tense.

Asking about illustration exercise

The texts were covered and only illustration part of the game were exposed to kids and asked to guess the content in english.

Kids were trying to attempt the correct answer possible also trying to recall correct verb tenses.

Testing 3 (All 4 player included)

A Pack of cards (Two and half dozen question card and same amount of answer card)- Included Present and Future tense (simple, continuous & perfect). Only three answer cards were distributed among each kid and the pack of question cards were kept still. Again a question card have to be picked one at a time in sequencing of the players, then all the players have to check for its answer and submit it, and so the game proceeds turn by turn.

1. Time taken to complete the game was 14 min.
2. Kids didn't use chart again.
3. Reeba finished her cards first, Aarifa 2nd , Sahil came 3rd and Ashna came last

Concern

How did they were getting correct answers without referring to chart?

Were they being able to construct or understand the meaning of the sentences or they were recognizing the pattern?

They were searching only through the clue word present in the question card. For e.g (run - past simple) they were seeing only run (verb) they said and then searching for the answer card with run or ran whichever sounds near to the clue.

Reverse testing

In this part the whole gameplay was reversed, all three tenses were included. All the question cards were distributed among the kids and answer cards were kept still and have to be picked one at a time in sequencing of the players.

1. Time taken to complete the game was 25 min.
2. Kids didn't use chart again.
3. Reeba finished her cards first again, Ashna 2nd, Aarifa came 3rd and Sahil came last.

Kids seems to observe more text and image of the question cards than the previous gameplays.



Game testing 1
Kids playing the game.



12. Findings from testing 1.

1. Need a pack of cards without verb clues but with only type of tenses written as clues, leaving it upon players to identify the action from the illustrations and deciding the possible answer of it. This would might encourage kids to refer the pattern given in the chart for identifying tenses.
2. If the pack of cards are without verb clues, colour coding of tenses becomes important .
3. Due to mix age group and different standards of kids, if a kid submits the wrong answer the other kids argue about it saying it is incorrect and the kid who has submitted the wrong answer tries to defend (finding through observation during gameplay 1 and 2, this happened 3 times).
4. Question cards should be bigger in size as compared to answer cards to reduce the chaos, the answer cards have to be held in hands. Current size of the card is 3x4 inch. The next size will be 2.5x3.5 inches for answer card (poker size) and for question cards it will be 4x5 inches (as question cards incorporates text and illustration both).

Revised version colour coded

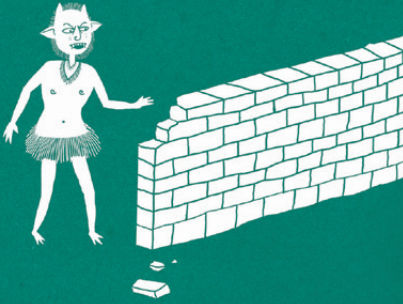
Color coding will help in reducing the cognitive load of the player by diving into major sections i.e Past, Present & Future.



Prototype 2: Sample of revised version of cards .


Bhooka _____ the wall of Grammangal.

(Break - Present continuous)

A white line drawing of a woman with pointed ears and a necklace, standing next to a brick wall. She is breaking a brick, with one brick lying on the ground.


Bhooka _____ all the teachers in Grammangal.

(Eat - Past perfect)

A white line drawing of a woman with pointed ears and a necklace, holding a brick in her hand as if eating it. In the background, there is a school building with a grid roof.

Rahul _____ pappu's face.

(Hit - Future continuous)

A white line drawing of two women. One woman is hitting the other on the face with her hand.

is breaking

had eaten

will be hitting

13. Testing: Game prototype 2.

With Urdu medium school children.

Before testing the game on Grammangal kids I decided to visit Urdu medium kids in Bhiwandi as it was in my reach (distance) and were perfect for the evaluation, as their proficiency of english was very weak(Grammangal had a long vacation of Diwali for around 25 days).

It was the time of Diwali vacation and all the schools were shut in Bhiwandi. I went home to home in and around my neighbourhood asking about kids of urdu medium school, my aunt helped me in the process and after a long search we were managed to arrange 12 kids.

4 out of 12 were played the first two game and rest were the passive observers and the last game was played by other 6 kids. Tenses were first introduced in 8th standard to these kids in school.

All of them were from urdu medium from 5, 6 and 7th standards and their proficiency level of english was low they were finding difficulty in getting the simple words. A girl from 9th standard was good among all, because of change of syllabus 5 years back (state board Maharashtra).

Structural grammar have not been extensively taught till 8 standard in urdu medium school. First I tried to check their proficiency level by asking them to read the texts on the cards and then by asking to describe the action into verb (in english) but they were unable to articulate it. So I decided to go with the cards having 'verb' as a clue.

Observation during the game.

Slowly as the game proceeded, the children seems engaged with the game. One thing was still common that they were searching answers only through verb clues. A constant push needed for them because of a an alien person coming and giving them a game to play. 2 kids were searching answers only from the chart and not seeing the answer card at all, after making the point clear of chart they started searching through cards in their hands. It took roughly 25 min to finish the game.

The next game went well in terms of playing and a faster response than the previous one, kids were engaged and 2 new kids also joined the other observing kids.

The penalty card provokes anxiety among kids that they didn't want to get a penalty card which acted as a positive for game perspective.

	D	E	F	G	H	J	L										
	Dream	Dig	Eat	Fall	Fear	Float	Fly	Follow	Go	Grow	Hang	Hide	Hit	Hop	Jump	Laugh	Leave
Present Simple	Dreams	Digs	Eats	Falls	Fears	Floats	Flies	Follows	Goes	Grows	Hangs	Hides	Hits	Hops	Jumps	Laughs	Leaves
Present Continuous	is dreaming	is digging	is eating	is falling	is fearing	is floating	is flying	are following	is going	is growing	is hanging	is hiding	is hitting	is hopping	is jumping	is laughing	is leaving
Present Perfect	has dreamed	has dug	has eaten	has fallen	has feared	has floated	has flew	have followed	has gone	have grown	has hung	has hidden	has hit	has hopped	has jumped	has laughed	has left
Present Perfect Continuous	has been dreaming	has been digging	has been eating	has been falling	has been fearing	has been floating	has been flying	have been following	has been going	have been growing	has been hanging	has been hiding	has been hitting	has been hopping	has been jumping	has been laughing	has been leaving
Past Simple	Dreamed	Dug	Eaten	Fallen	Feared	Floated	Flew	Followed	went	Grew	Hung	Hide	Hit	Hopped	Jumped	Laughed	left
Past Continuous	was dreaming	was digging	was eating	was falling	was fearing	was floating	was flying	was following	was going	was growing	was hanging	were hiding	was hitting	was hopping	was jumping	was laughing	was leaving
Past Perfect	had dreamed	had dug	had eaten	had fallen	had feared	had floated	had flew	had followed	had gone	had grown	had hung	had hidden	had hit	had hopped	had jumped	had laughed	had left
Past Perfect Continuous	had been dreaming	had been digging	had been eating	had been falling	had been fearing	had been floating	had been flying	had been following	had been going	had been growing	had been hanging	had been hiding	had been hitting	had been hopping	had been jumping	had been laughing	had been leaving
Future Simple	will dream	will dig	will eat	will fall	will fear	will float	will fly	will follow	will go	will grow	will hang	will hide	will hit	will hop	will jump	will laugh	will leave
Future Continuous	will be dreaming	will be digging	will be eating	will be falling	will be fearing	will be floating	will be flying	will be following	will be going	will be growing	will be hanging	will be hiding	will be hitting	will be hopping	will be jumping	will be laughing	will be leaving
Future Perfect	will have dreamed	will have dug	will have eaten	will have fallen	will have feared	will have floated	will have flew	will have followed	will have gone	will have grown	will have hung	will have hidden	will have hit	will have hopped	will have jumped	will have laughed	will have left
Future Perfect Continuous	will have been dreaming	will have been digging	will have been eating	will have been falling	will have been fearing	will have been floating	will have been flying	will have been following	will have been going	will have been growing	will have been hanging	will have been hiding	will have been hitting	will have been hopping	will have been jumping	will have been laughing	will have been leaving

1

	A	B	C	D													
	Ask	Achieve	Bath	Beat	Break	Build	Catch	Celebrate	Chase	Clean	Collect	Come	Cry	Cut	Dance	Do	Draw
Present Simple	Asks	Achieves	Baths	Beats	Breaks	Builds	Catches	Celebrates	Chases	Cleans	Collects	Comes	Cries	Cuts	Dances	Does	Draws
Present Continuous	is/are asking	is/are achieving	is/are bathing	is/are beating	is/are breaking	is/are building	is/are catching	is/are celebrating	is/are chasing	is/are cleaning	is/are collecting	is/are coming	is/are crying	is/are cutting	is/are dancing	is/are doing	is/are drawing
Present Perfect	has/have asked	has/have achieved	has/have bathed	has/have beaten	has/have broken	has/have built	has/have caught	has/have celebrated	has/have chased	has/have cleaned	has/have collected	has/have come	has/have cried	has/have cut	has/have danced	has/have done	has/have drawn
Past Simple	asked	achieved	bathed	beaten	broke	built	caught	celebrated	chased	cleaned	collected	came	cried	cut	danced	done	drawn
Past Continuous	was/were asking	was/were achieving	was/were bathing	was/were beating	was/were breaking	was/were building	was/were catching	was/were celebrating	was/were chasing	was/were cleaning	was/were collecting	was/were coming	was/were crying	was/were cutting	was/were dancing	was/were doing	was/were drawing
Past Perfect	had asked	had achieved	had bathed	had beaten	had broken	had built	had caught	had celebrated	had chased	had cleaned	had collected	had come	had cried	had cut	had danced	had done	had drawn
Future Simple	will ask	will achieve	will bath	will beat	will break	will build	will catch	will celebrate	will chase	will clean	will collect	will come	will cry	will cut	will dance	will do	will draw
Future Continuous	will be asking	will be achieving	will be bathing	will be beating	will be breaking	will be building	will be catching	will be celebrating	will be chasing	will be cleaning	will be collecting	will be coming	will be crying	will be cutting	will be dancing	will be doing	will be drawing
Future Perfect	will have asked	will have achieved	will have bathed	will have beaten	will have broken	will have built	will have caught	will have celebrated	will have chased	will have cleaned	will have collected	will have come	will have cried	will have cut	will have danced	will have done	will have drawn

2

Tenses काळ

PAST

Verbs

Past simple
रंगवले

Eat Ate
Run Ran
Fall Fell
Follow Followed (ed)
Reach Reached (ed)
Stretch Stretched (ed)

Past continuous
रंगत होती

Walk was/were walking (was __ing) (were __ing)
was were

Past perfect
रंगवल होते

Collect had collected (had __ed)

PRESENT

Verbs

Present simple
रंगवणे

Eat Eats (s)
Run Runs (s)
Fall Falls (s)
Follow Follows (s)
Reach Reach
Stretch Stretch

Present continuous
रंगत आहे

Walk is/are walking (is __ing) (are __ing)

Present perfect
रंगवल आहे

Collect has/have collected (has __ed) (have __ed)

FUTURE

Verbs

Future simple
रंगवेल

Eat Will eat
Run Will run
Fall Will fall
Follow Will follow
Reach Will reach (will)

Future continuous
रंगत असेल

Walk Will be eating
Will be running
Will be falling
Will be following
Will be reaching (Will be __ing)

Future perfect
रंगवल असेल

Eat Will have ate
Run Will have ran
Fall Will have fallen
Follow Will have followed
Reach Will have reached (Will have __ed)

3

FUTURE

Future simple
रंगवेल

Will eat, Will run, Will fall

Future continuous
रंगत असेल

Will be __ing

Present perfect
रंगवल असेल

Will have __ed

PAST

Past simple
रंगवले

Example: Ate, Ran, Fell, __ed

Past continuous
रंगत होती

(was __ing) (were __ing)

Past perfect
रंगवल होत

had __ed

PRESENT

Present simple
रंगवणे

Eats Runs Falls

Present continuous
रंगत आहे

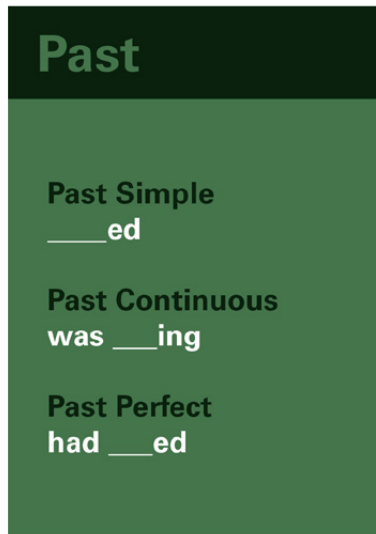
(is __ing) (are __ing)

Present perfect
रंगवल आहे

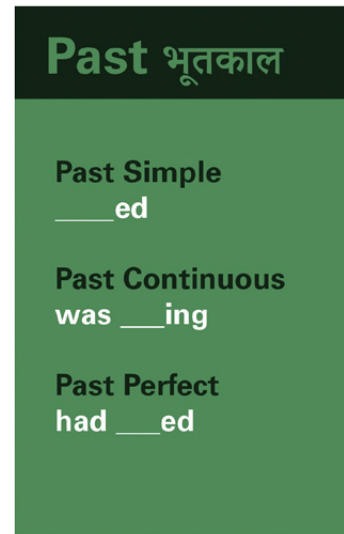
(has __ed) (have __ed)

4

14. Transformation: Reference chart to cards.



5



6

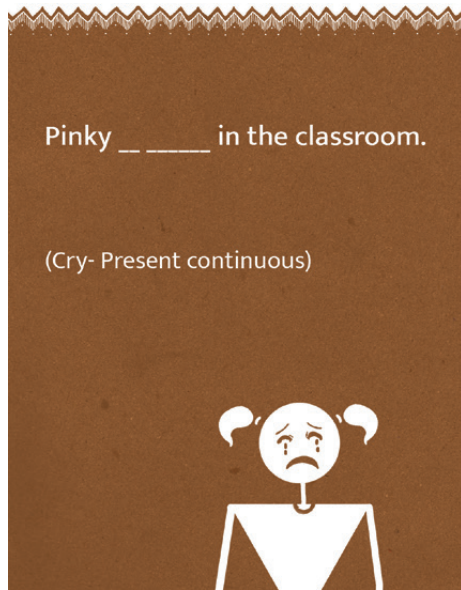


7. Final version

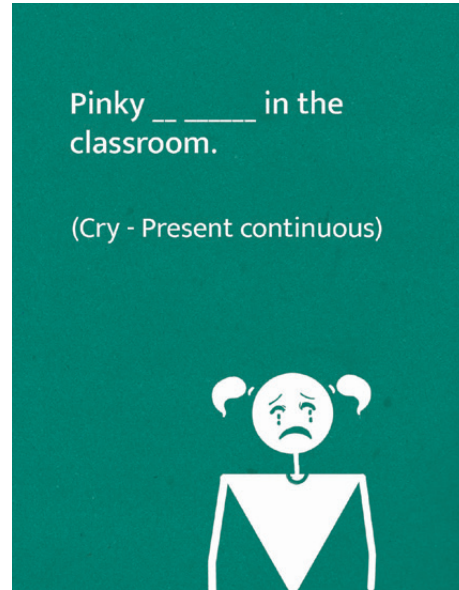
Transformation: Reference chart to cards.

1. All verb tense reference chart (A3 size).
2. Excluding 'perfect continuous' after first testing because of its complexity (A3 size).
3. Reducing the chart and focusing on 'tense' attribute format after second testing (A4 size with colour coding).
4. Reducing the size of the chart into cards, focused only on attributes.
5. More reduced, focusing only on one person attributes.
6. Introducing devnagri name in card and reducing card size to ideal poker size for hand friendly.
7. Removing colour coding after findings from last testing.

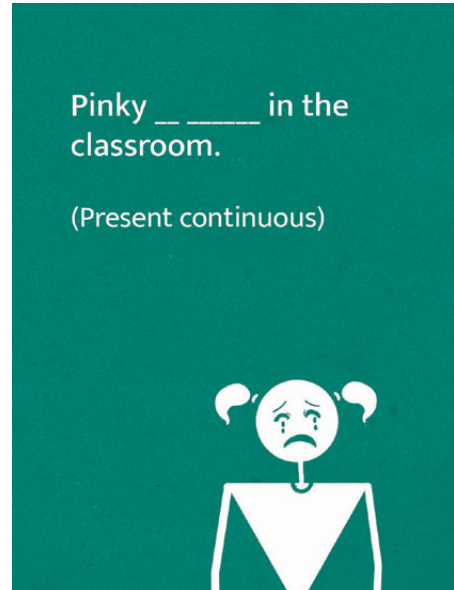
Transformation of answer cards.



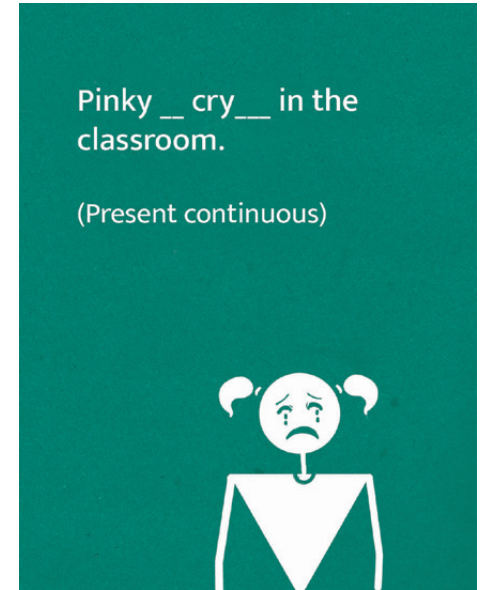
1. Card with verb clue for testing 1



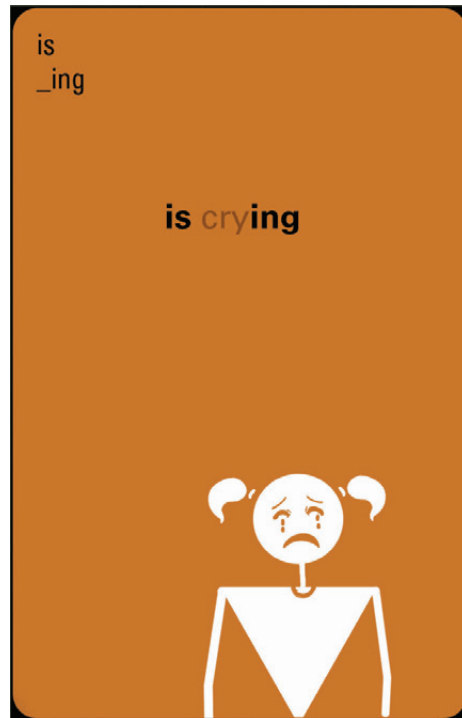
2. Colour coding with verb clue, changes made testing 1.



3. Colour coding without verb clue, changes made testing 1.

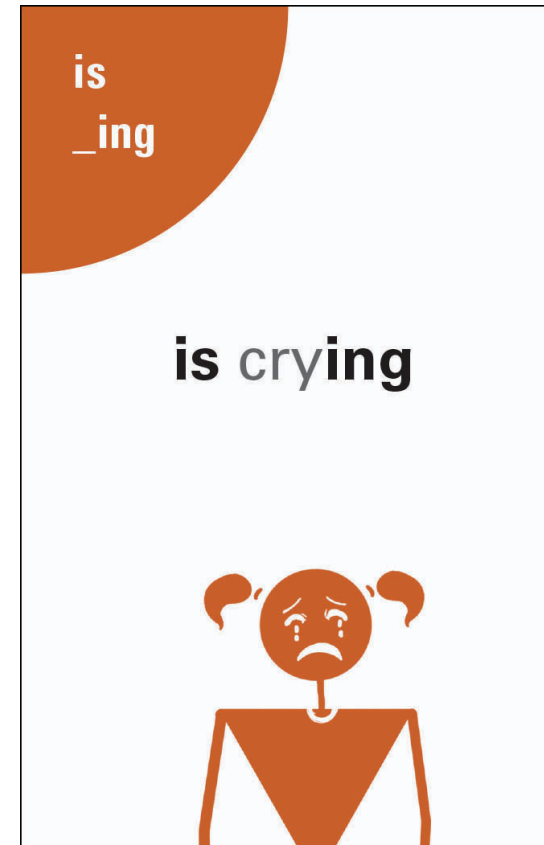


4. Colour coding with verb given, focused on tense attribute. Changes made after peer to peer testing.



5. Complete focus on the attribute of tenses for testing.

Final version



6. Final version of the game after the observation of last testing.

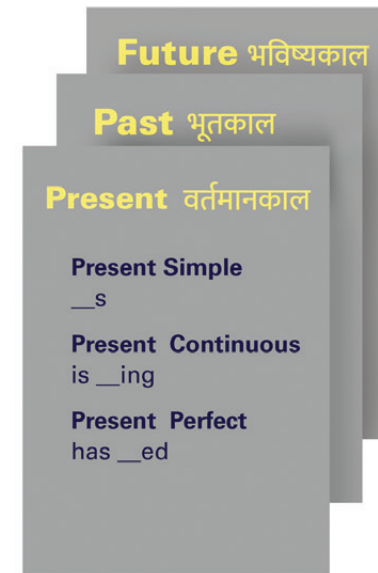
15. Final game assets(prototype 3).



Answer cards to be collected and arranged in the order of tense referense card.



Power card: whoever gets the power card can use it against the 2 other players.



Tense reference card.

16. Prototype 3(Final).

The game consist of 36 cards(attributes) and 2 power cards which gets distributed among 3 players, additionally 3 tense reference cards out of which 1 each will be given to the players i.e Past, Present and Future. Nobody will tell who has which card.

The distribution of the cards is done by the 4th kid who terms as a 'boss', the boss regulates the game in order and have the power to take away the players tense reference card at any point in the game. Before taking the reference card the boss will announce that after the next turn I am going to take back the reference card so remember the details and the players have to remember the details on the reference card in order to play the game.

Whoever arranges the 12 respective cards first and announces 'I have it' will win. The boss then checks the answers if it's correct or not.

The game comes in the format of best of three, so in order to win the game players have to win the game 2 times. The player who will win the game will then becomes the boss for another set.

Present

Simple
s

Continuous
is ___ing

Perfect
has ___ed

Past

Simple
ed

Continuous
was ___ing

Perfect
had ___ed

Future

Simple
will

Continuous
will be ___ing

Perfect
will have ___ed



17. How to play

1. Choose a random player Boss for the first game.
2. The boss will then evenly distribute cards to all the players + the tense reference card.
3. Then each kid have to look for the similar cards given in their tense reference card.
4. The cards which doesn't match with the reference cards, will then have to be put in front of everyone one at a time in sequence of the playing order and once all three players placed their cards they then have to pick one card which they think is matching for them. This circle goes on till anyone of the player has arranged all the right sequence and announces 'I have it'.

If a player has the power card “दुनिया उलटी पलटी” and submitted it then the adjacent players have to give their cards to the boss and it will again be shuffled and redistributed to the two players.

Observation during the testing.

1. The first game took averagely 25 mins and for a complete set an hour.
2. As a single kid has to focus only on one tense at a time the fluidity of the gameplay increases. Power card increases anxiety as it acted as a complete game changer.
3. When the reference cards were taken away from the players they were dependent on their memories. The chances of mixing between has and had increases. One player got confused in the first game between has and have but got right in the second game.
4. As the game pushes kids to form groups of cards its arrangement becomes important, one kids arranged the positive cards separately and was playing with the additional cards.
5. Through the engagement it appears that they enjoyed the game.

18. Conclusion

Living languages are ever evolving, knowing them opens up a whole new world and perspectives to their users to see the world differently. They come with a new set of flavours to the mind and bring along stories, thoughts, views, opportunities and the most important thing is being able to share and express one's own mind.

My project aims at experimenting with the possibilities of game design to increase the engagement of Children with the english language specially grammar. Exploring ways to teach how to identify 'tenses' (grammar) through its attributes was the main focus of the whole process. I have used familiar stories and visuals from their environment (Warli art) and blended them together in various stages of the game.

There are multiple layers of grammar learning in the traditional teaching methodologies, from which teaching through pattern is a crucial part but at times it becomes boring for learners.

Evaluations of the game suggests that the game has been successful in engaging the students. It also tries to increase the habit of pattern making and remembering. It does so by taking the aid of 'tense reference card' and through competitive nature of the game.

The project has gone through explorations and trials, allowing for several visual design explorations. The game makes the pattern learning and identification fun and a choice of student which further can aid teachers while teaching. Through my whole journey in the project I have experienced that there are numbers of areas in the domain of English grammar that needs pattern learning and recognition which through games can be tested.

Initially, I was overwhelmed by the vastness of the project, the idea that there are several dimensions on which work has already been done and I didn't knew structural grammar myself, learning of which helped me in overcoming several problems. The explorations, trials and errors, and constant engaging with children have taught me a lot and helped me in refining the whole project which led multiple trials and iterations with visual design as well as making things efficient.

19. Bibliography

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