





## "SOFT SKILLS FOR A BETTER LIFE" -KA229



## WHY STORYSTEM?

Reading, writing, and oral communication are literacy practices that enable an individual to grasp ideas, change thoughts, enrich understanding, and solve problems. The aspects on which you stop your attention refer to the scientific alphabet, an educational priority that has the role of developing those skills that the student will in the world of science, technology, engineering, mathematics and not only. While it is crucial for children to develop skills in STEM subjects, they need to improve their literacy skills first. Literacy skills are critical to understanding STEM concepts and will lead to success in all subjects.

STEM literacy should not be viewed as a content area, but as a means composed of skills, factual knowledge, procedures, concepts, and metacognitive capabilities to achieve further.

We live in a rapidly changing world with a technological evolution to which we must adapt and for which we, the teachers, must find educational approaches to develop their responsibility and capacity for active involvement in the classroom, family, in the group of friends in a perspective that will continue throughout life.









## JACK AND THE BEANSTALK by Joseph Jacobs- STEAM PROJECT 3rd A grade, School Elena Doamna, Tecuci, Romania

NAME	(tittle of lesson plan) titlul planului de lectie	Grade clasa:	N° of lessons: nr	
Mititelu	STEAM PROJECT	A III-a A	de lectii	
Valerica			3 hours	
Școala Elena	JACK AND THE BEANSTALK by Joseph Jacobs-			
Doamna-	<b>Gu</b> eoss			
Tecuci				
Summary	(brief explanation of unit) explicatii privind tema aleasa			
sumar	STEAM activities allow us a modern, transdisciplinary approach, the classroom			
	thus becoming a creative learning environment, where students develop new ways			
	to solve problems, acquire those competences targeted for the age category, create			
	and use working tools in an innovative way. As part of the Erasmus + SOFT			
	SKILLS project, we have chosen this new approach to help students understand facts, events and phenomena around them through an integrated and experiential			
	approach, starting from literary texts.			
Contents	( describe 4/5 contents what is worked by student	ts in regarding with c	urriculum)	
continut	1. Limba română/ Romanian- textul JACK ȘI VREJUL DE FASOLE de Joseph Jacobs/ JACK AND THE BEANSTALK by Joseph Jacobs			
	/ Unit THE LAND OF CHILDREN - revision			
	2. Ştiinţe/ Science - Unitatea Plantele , tema <b>Creşterea şi înmulţirea plantelor</b> / Unit PLANTS, <b>Lesson</b> How the plants grow			
	3.AVAP/ ARTS AND PRACTICAL ABILITIES COMBINED WORKING TECHNIQUES	S - TEHNICI DE LUC	CRU COMBINATE/	
	4. Matematică/ MATHS- Măsurători, , comparați	i		

Aims	( describe 4/5 goals what is expected to be learned by students)
obiective	Students must:  Students must:  - extract detailed information from an accessible informational or literary text;  - formulate opinions about a story / its characters;  - participate in interactions to find solutions to problems  - test the proposed solutions using technology and engineering  - create basic conditions to grow plants, following their evolution, measuring, comparing
Resources	(write down any resource used such us web links, youtube)
	RESOURCES: - the text Jack and the bean stalk by Joseph Jacobs - hats for the Thinking Hats method - worksheets to understand the text and the comics - WORD documents for posters, use of the school's IT lab - https://www.twinkl.com/ resources: Journal of a bean plant and posters How to grow a plant, agamograph - the stages of bean growth - paper, cardboard, scarves, balloons, feathers, twine, scotch - to create Jack's means of rescue - beans, soil, reused plastic containers for sowing vessels, bags and paper towels for the version sticked in plastic on the window, in order to observe the growth of the plant - useful links:  http://www.morethanaworksheet.com/2014/09/19/jack-and-the-parachute-in-pictures/ https://steam4south.weebly.com/uploads/5/0/7/1/50715375/fairytalestemjackandtheparach ute.pdf  to explain what has been worked or relationship with Steam areas)
Science	How the plants grow- Sowing beans
Technology	Children used the tablets for information on how they sow beans, took photos of their colleagues during their work and observing the growing of the beans, and in the computer lab they made a non-literary text in the Word: Poster for a theater performance Jack and beans
<b>E</b> ngineering	Finding solutions to help the Jack save himself: they made and tested parachutes, gliders, wings (thinking of feathers from the giant 's hens), a kite, a hot air balloon, rope ladder.
Art	Comics with another end for reading and coloring agamographs that contained the stages of the evolution of the bean to the plant with leaves, flowers and fruits.
<b>M</b> aths	Periodic measurement of growing, comparisons

## $\underline{\textbf{ACTIVITIES:}}$

## 1.Romanian

To develop the specific skills of the Romanian language: extracting some detailed information from an accessible informational or literary text; formulate an opinion about a story / its characters; participating in interactions to find solutions to problems, after the explanatory reading of the text,

grouped in three, the students completed the tasks on the worksheet (Cadrans) regarding synonymy, filling in the blanks using information from the text, expressing their opinion on the text agreement / disagreement with what Jack did.

The Thinking Hats Method is an interactive technique to stimulate the creativity of the participants, which is based on the interpretation of roles depending on the hat chosen, I opted for this considering that the competencies we have targeted can be effectively achieved in this way. The tasks of the Thinking Hats were as follows:

1. White hat - inform Briefly tell what happened in the text.

2. The red hat - feelings

What feelings have you had while reading?

3. The black hat - negative aspects

What do you disagree with? Why?

4. The green hat - creativity

Imagine a dialogue with Jack. What would you talk to him about?

5. Yellow hat - positive aspects

What qualities of Jack have you discovered during your reading?

6. Blue hat - clarifies

Clarify why Jack acted this way during the events in the story.

## 2. Science:

Students had to sow beans - in the ground or in transparent bags, glued to the classroom window, respecting the conditions necessary for growing a plant, followed by observations being recorded in the Journal of a bean plant (resource downloaded from Twinkl).











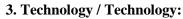
Children used the tablets for information on how to sow properly - also a Twinkl resource - they took pictures of their colleagues during work, they began to photograph how the beans have evolved, and in the computer lab they made a non-literary text in Word.: The poster for a play: Jack and the beanstalk, to apply what they learned at Romanian lessons on the topic Posters and Flyers.

## 4. Inginerie/ Engineering:

Students were challenged to imagine that the giant blocked Jack's access to the house, and they were asked to find solutions to help him save himself and reach home safely. The students made and tested parachutes, gliders, wings (thinking of feathers from the chickens of the giant), a kite, balloon, rope ladder. After the tests they improved the objects they made. The kite was tested outside and some parachutes were released from the classroom window.



reading.





## 5. Arte/ Art:

Students had to draw comics with another end for



#### 6. Matematică/ Maths:

Based on the observations, the children will measure and grow the plants and compare the results.

ANEXIS

JACK ȘI VREJUL DE FASOLE de Joseph Jacobs

## **Summary**

The well known story of **JACK AND THE BEANSTALK** was the starting point of our actitivity. The story tells us that Jack went to the fair to sell the cow because he and his mother were very poor. On his way, Jack meets a person who asks him to take some magic beans for the cow. He agrees but his mother is very upset. She throws the beans out and during the night a enormous beanstalk is growing up to the sky. The boy decided to climb the beanstalk and there he finds himself in the castle of an unfriendly giant. He goes into the castle and steals a singing harp and a hen that lays golden eggs. The giant chases Jack and follow him.

In the story, the giant chases him and follows him down he beanstalk. Jack's mother chops down the beanstalk before the giant reaches the ground. Jack and his mother live happily ever after.

<u>Children have this challenge:</u> the giant, having learnt from past mistakes has lined the beanstak with wires so that the boy is not able to go home. Jack need another plan for escape. Use your imagination to find solution in order to help Jack.

**Solutions:** A parachute, wings made of feathers of the hens from the giant 's yard, a huge kite made of leaves/ clothes, A long ladder made of strings

https://kizoa.app/Movie-Video-Slideshow-Maker/d322688567k1654514o2l1/Soft\_Skills-\_our\_story







# Apolodor a travelig penguin by the Gellu Naum



### **Summary**

Apolodor, was a penguin from Labrador, singing in the choir of the Bucharest Circus.

Although he had many friends at the circus, like the kitten Tiţ, the camel Suzi, the rabbit Buză Lată, the bear, the hedgehog and the master Domilasolfa. One day he started missing his family at the South Pole. He cried and was sad for many days, until he decided to go visit them.

At first he flew a plane, then, no longer patient, he parachuted and landed at the North Cape.

Located thousands of miles from Labrador, alone on the secluded glacier in the Atlantic Ocean, without a compass, without a map, listening to the terrifying noise of the water, Apolodor began to cry again, wondering how could be reach his destination.

During Romanian classes students read the text abou Apolodor and understand the text, the problem from the text.





During Science lesson students use maps, nad the Plantet to see the route of Apolodor





Art it was their preferate activity, because using craft they create pinguins and also the North Pole!





Students aidentify the problem from the story, so they create planes, ballons to help the pinguin to travel around the world.













## THE QUAIL de Alexandru-Bratescu Voinesti

### **Summary**

Erasmus+ Programme

In a spring, a quail "almost dead from fatigue", because it came from far away, from Africa, leaves in a green wheat field, on the edge of a shoot. After resting, she began to build a nest of sticks, dry twigs, leaves and hay straw. Seven days in a row she laid one egg, which she began to hatch. After three weeks, seven small chicks came out.

In the first days of life, the chicks are presented with tenderness and humor by the author \*: they were "cute, not naked like sparrow babies, dressed in yellow puff, but small, like seven silk donuts. But the quiet life of the quail and her chickens is troubled by an unforeseen event \*: once, in June, when the peasants came to reap the wheat, the eldest chick did not rush at his mother's calling her and asa he did not know how to fly, a boy caught him under his hat. The chick was frightened and his heart was beating like a clock, but he was lucky for an old peasant who prayed for him. When he saw himself escaped, he ran to the quilt to tell her what had happened. She took him, patted him and rebuked him as a parent, telling him that when he grow up, he will do what he wants, but now he is small and does not have to go out of his mother's mind.

By the time, the chicks grew up, the puff changed into flakes and feathers, and with their mother's help, they began to fly. Their mother told them that she was teaching them to fly for a long, long journey that they will make soon, after the summer passes ...

But another event, this time with tragic consequences, disturbs the quiet life of the chicks. One afternoon, at the end of August, "while the chickens were1 playing in the bushes around the quail", a wagon is heard coming and stopping on the road by the shrubbery. Their mother quickly realized that he was a hunter with his dog and was stuck.

Their escape was the sprout, but it was precisely there that danger came. Their mother tells them that now she will fly and they will remain motionless, warning them that the one who flies is lost. The eldest baby, instead of standing still like his brothers, flies; the hunter hears him, returns and shoots. The big, wounded chicken could fly to the shoot, but there has fallen out with the dead wing.

Towards the evening, the chicks heard their mother's voice calling out from the head of the stubble: "Pitpalac! pitpalac! ... "They flew quickly to their mother, she counted them, but one was missing. The other chicks told her that they don't know where the chick is, he flew.

When his mother found him with a broken wing, she understood that he was lost, but she hid her pain. Since then, sad days for the poor chicken began; he was staring with tears at his brothers who were learning to fly in the morning and evening. And so the summer ended... In the heart of the poor mother there was a heartbreaking affair: half of her heart wanted to leave with the healthy chicks, who suffered the cold of the advanced autumn, half wanted to stay with the hurt chick, who was clinging to her.

The hostile blowing of the wind brings into the soul of the quilt the decision that she had avoided so much. She chooses to leave with healthy chicks, to save and leave the hurt one. In order not to weaken her decision, she flew with the chicks, without turning her head back, while the wounded cried out in despair:

"Don't leave me!" "Don't leave me!"...

First students read the received fragment (until the quail leaves the sick chick). Answer the questions asked, proving the understanding of the text.

Complete a worksheet from which they learn new expressions and words and a worksheet with various exercises that help them studying the text.





Students bring pictures and information about the quilt. They present PPT materials about the text addressed.



By the "Thinking Hats" method, children express their opinions about the errant chicken, his brothers and quilt.



Children are encouraged to find ways to help the chick left alone. They find saving solutions.

- 1. The peasant who came in the summer, passing the wagon there to gather crops left in the field, takes him home to care for him until spring.
- 2.On their flight to the warm countries, a few larger birds weave a net of dry leaves and branches and take the chick with them.
- 3. A family traveling with the balloon carries the sick chick to his family in the land of the Sun.
- 4. The chicken is transported to the warm countries by a special animal plane.
- 5. Two children find him and build him a little house in which he has heat, water and food.
- 6. The hunter returns to the hunt with a field car, finds him, takes pity on him and takes him home to his grandchildren who take care of him.













## Lars Polar Bear and Husky Pup

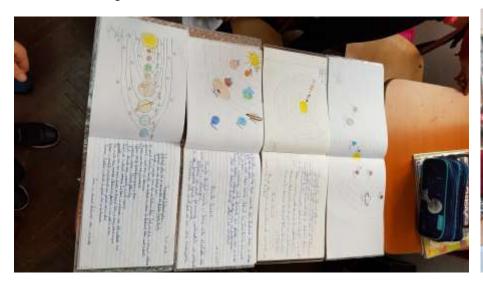
The Lars and the husky puppy story show the life of a polar bear at the North Pole. While searching for food, he moved to an igloo that was guarded by husky dogs and followed Lars by running him. Lars stopped and after a while he hears a puppy crying, he was of a husky puppy that lost his family. Being very cold the two ways are looking for a solution to shelter.

Students found that the best solution would be to build an ice Igloo, being the most common shelter in that area. Students used sugar cubes, recyclable materials, marshmalow and other materials.

Reading the text – understandind the problem



Science – learning about UnIvers- Earth North and South Pole





Learning about clima change, Melting glaciers and endangered animals

What are the animal adaptations to live at the North Pole? How does the body of animals protect the fat layer? Experiment:







Math - How to build an igloo - building on the square footage - structure, shape, number of pieces



Art-building iglu for the animals:











## Rosie Revere, little engineer

de A .Beaty

Rosie Revere was a withdrawn little girl, silent, even strange, who made up all sorts of crazy devices: helium pants, python chase hat, hot dog food. One summer, Aunt Rose, an aviation engineer, comes to visit them at home. The two had a very close relationship and, in a discussion, she tells the girl that she has an unfulfilled wish: although she had worked with airplanes all her life, she had not been able to fly.

Rosie begins to think about what aircraft her aunts can build. Night and day he thinks, masters and, in the end, builds his aircraft: the cheese-copter.

Students have to guess and design the aircraft that they believe was invented by Rosie: airplanes, helicopters, missiles.

Students built Lego and recyclable airplanes, recyclable rockets, lego and cube helicopters for Aunt Rose. Then I presented them with the solution found by Rosie - the cheesecopter.



















### **RAPUNZEL**

## **By the Grimm Brothers**



A man lived with his wife in a house next door to a witch's house. The wife longed to eat the lettuces in the witch's beautiful garden.

One day, the husband decided to steal some of the lettuces for his wife. The witch caught him and asked for the baby the wife was to give birth to in exchange for the salad.

The little girl was born, the witch took her and named her Rapunzel.

When Rapunzel grew up, the witch locked her away in a tower in the middle of the forest. The girl had very large golden hair.

The witch visited her and to get to the tower she asked Rapunzel to let her hair down so she could climb on it.

One day, a handsome prince found the tower in the forest. He watched the witch come to the tower and climb Rapunzel's hair. When the witch had gone, the prince climbed Rapunzel's hair. The two saw each other and decided to stay together. The witch confuses their plans, but in the end Rapunzel and the prince found themselves and lived happily ever after in his kingdom.

Students were then challenged to imagine that the prince would ask them to help rescue Rapunzel from the tower before the witch discovered their plan to leave together. After each student has thought of some ways Rapunzel can get away, teams of 3 students chose one they were going to build. They planned their materials and design, then built the escape route based on the plan and had the chance to test them out: parachutes, rope ladders, wool, shoelaces, thin cable zip lines, paper roll slides, pulleys, Lego planes.

During romanian classes students read the text Rapunzel and select the problem to solve:







During science classes and art they study about materials, proprieties:





















## San Isidro.

Isidore was born in Madrid, in about the year 1070, Isidore spent his life as a hired hand in the service of the wealthy Madrilenian landowner Juan de Vargas It was said that he stood two meters (6.5 feet) tall.

Isidore married Maria, known as Santa María de la Cabeza in Spain. Isidor and Maria had one son. On one occasion, their son fell into a deep well and, at the prayers of his parents, the water of the well is said to have risen miraculously to the level of the ground, bringing the child with it.

There is a well with a baby falled into water. He can't climb up, he can't hang at the rope. The well is too narrow for adults.

One solution is to make the water rise to the level of the ground so that the baby can be saved.



One solution is to make the water rise to the level of the ground so that the baby can be saved.











## **COLAPESCE** the boy who saved Sicilian Island

## Colapesce

This is the story of a Sicilian boy named Cola but everyone called him "Colapesce (pesce=fish)" because he loved the sea and he spent his days swimming and diving. He lived in Messina, a beautiful city in the east coast of Sicily, with his mother. She didn't like Cola' strange habits and she was used to tell him: "You will change into a fish sooner or later"!

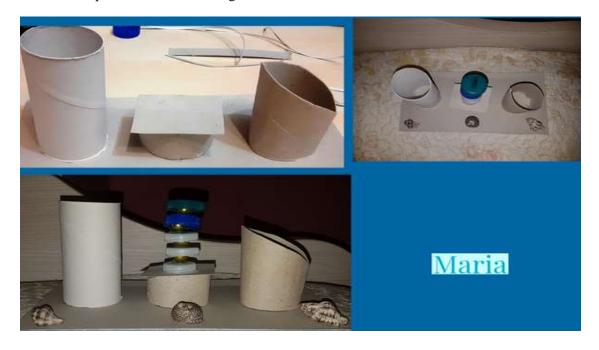
Colapesce was used to go out and tell to everyone about the wonderful treasures he was seeing while diving.

One day Federico II king of Sicily, heard about Colapesce and about his strange adventures. The king was curious and asked him to have a look in the deepest sea to find out what can hold the Sicilian island up. Colapesce went down the sea and when he was back he said "Sicily is hold up by three columns but one of them has been damaged by a magic big fire. I suppose that our Sicily will be soon submerged by the sea". Both the inhabitants and the king were scared. They begged him to help them. Colapesce, even though he knew that diving that deep was extremely dangerous, decided to go.

Since that time the king and the inhabitants never saw him again. Everybody said that Colapesce had became half man and half fish and had remained under the sea helping the third column to remain stable. Up to now he holds up Sicily and prevents it to be submerged by the sea.

#### Our solutions

We propose the construction of a steel pipe to be placed in support of Sicily between Messina and Catania in replacement of the damaged





The king taken from compassion for the fate of Colapesce mobilized men from all over Sicily, who rebuilt a solid column



Another solution could be to build a pillar of stone more durable to replace the damaged one.





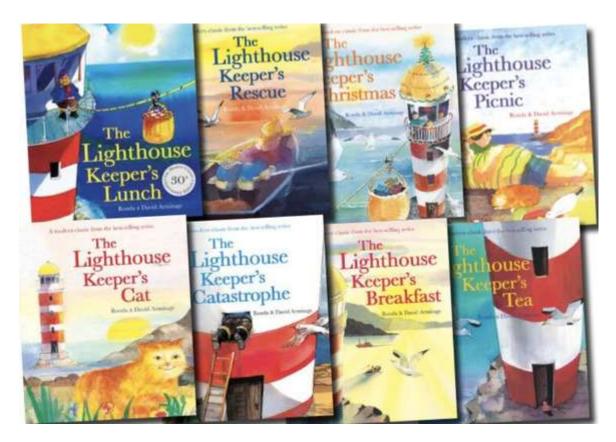








## Lighthouse collection



From The Lighthouse Keeper collection we read 3 books, and for each I also targeted scientific content. The investigation of a text can go in many directions and depends on the time we can give to the text. What I have brought new to these texts is a reading with predictions. The text is read to the climax, a moment similar to the emergence of a problem situation, when children are asked to identify solutions individually. We collected the solutions and grouped the similar ones. Thus, from this moment the students work in groups, exchange impressions and seek to improve your solution. The solutions take a STEM approach, students look for scientific information, use technology, draw, build, test, improve.









## THE LIGHTHOUSE KEEPER'S LUNCH

The activity within this project was carried out entirely online with the students of the second class A, after the schools were closed due to Covid 19. The activities were developed and integrated in the curriculum and respected the age level of the students.

The real steps for investigating this text were:

- 1. Read and understand the text
- 2. Read the text with predictions and discussions based on the ideas presented
- 3. Creating comics based on the text
- 4. Writing recipes and making drawings for a healthy lunch of Mr. Gringling
- 5. Reposting the text from the point of view of the other characters in the text and identifying emotions and states
- 6. seeking information on the history of the lighthouses in the world and the structure of a lighthouse
- 7. Making models using flour, salt and water dough and identifying new solutions for lunch to reach Mr. Gringling

#### **Objective of the activity:**

developing critical thinking and developing new skills based on the text given

## **Objectives of the project:**

- x Encourage students to collaborate and work together.
- X Development of communication skills (talking, presenting ideas and solutions to a problem, listening, understanding, empathy for a second and different opinion),
- x Problem solving (thinking, critical thinking, developing skills to deal with a problem, etc.). Development of skills for concentration and time management.
- X Self-regulation of learning, working in a conflict-free group and how to cope with success and failure

Key competences (to round out the ones highlighted during the implementation of the above activities):

The eight key competences are:

X 1. Communication in the mother tongue: the ability to express and interpret concepts, thoughts, feelings, facts and opinions verbally and in writing;

- 2. Communication in a foreign language: as mentioned above, but also includes mediation skills (ie, compression, paraphrase, interpretation or translation) and intercultural understanding;
- 3. Mathematical, scientific and technological competence: good mastery of mathematical literacy, understanding of the natural world and ability to apply knowledge and technology to human needs (such as medicine, transportation or communication);
- 4. digital competence: the safe and critical use of information and communication technologies for work, recreation and communication;
- 5. learn how to learn: the ability to effectively manage one's own learning, alone or in groups;
- 6. social and civic competences: the ability to participate effectively and constructively in social and working life and to participate in active and democratic participation, especially in increasingly diverse societies:
- 7. A sense of initiative and entrepreneurship: the ability to transform ideas into activities through creativity, innovation and risk-taking, as well as the ability to plan and manage projects;
- 8. Cultural awareness and expression The ability to appreciate the creative importance of ideas, experiences and feelings in the media, such as music, literature and visual arts and shows.

21st century skills (rounding and / or correspondence)

Creativity, organization, persistence, confidence, knowledge of languages, communication, desire for change, work for you,

Class (and age of students): II A Class, School Elena Doamna, Tecuci, Romania

Key question (s)

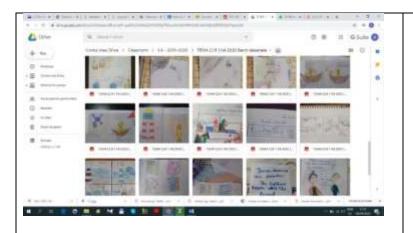
- \* Questions that encourage students to think and learn, questions with problems, motivational questions, questions that encourage discussion and dialogue.
- 1. Where was the lighthouse located?
- 2. How did Mr. Gringling get his lunch?
- 3. Is Mr. Gringling's Lunch a Healthy Lunch?
- 4. How can I send lunch so that it is not eaten by fishermen?
- 5. What other creative solutions do you discover

STEPS	ACTIVITIES		
		AIM	RESULTS

	roading the toyt	understanding	
MOTIVATION	reading the text into the online meeting using in the presentation, video the images from the book reading the text with predictions Reposting the text using videos from the point of view of the other characters in the text and identifying emotions and states	- understanding of the text and the possibility of reproducing the actions in the text - increasing interest in reading - use of the imagination and identify possible situations Communication in the mother tongue: the ability to express and interpret concepts, thoughts, feelings, facts and opinions verbally and in writing;	the students were attentive throughout the reading of the text, gave possible solutions to continue the story
EXPLORATION	students searched for information on seagulls life on the internet they discussed their way of life, their way of feeding	knowing the information about the seagulls environment Scientific and technological competence:, understanding of the natural world and ability to apply knowledge and technology to human needs (such as medicine, transportation or communication);	participated in debates on working groups where they presented the discovered information
CLARIFICATION	Creating comics based on the text Writing recipes and making drawings for a healthy lunch of Mr. Gringling seeking information on the history of the lighthouses in the world and the structure of a lighthouse	students created cartoons of their choice after different moments in the text  during the time of the online meetings I presented and discussed the history of the lighthouses and how they are built through a presentation and a video	the students uploaded the comics on google classroom, we presented them during the online meetings and we discussed about them

PRESENTATION OF RESULTS	the activities performed at home or during the meetings were evaluated and the students provided feedback to their colleagues	conducting an exhibition with comics and identifying solutions and identifying the best option	Exhibion in online tools
EVALUATION	Making models using flour, salt and water dough and identifying new solutions for lunch to reach Mr. Gringling	digital competence: the safe and critical use of information and communication technologies for work, recreation and communication; . A sense of initiative and entrepreneurship: the ability to transform ideas into activities through creativity, innovation and risk- taking, as well as the ability to plan and manage projects;	Working with the family, the students made models and found new solutions to send Mr. Gringling for lunch.

IMAGES	STEPS	STUDENTS
https://www.loom.com/share/3006a5d888ed44aaa2b6f9fbe7	Reading with	students
<u>25277b</u>	prediction	worked
		individually
		and presented
		their ideas
		during the
		online meeting
https://drive.google.com/drive/u/0/folders/0B-	Making comics	students
a1oAP_eaoPfml3UWxGZnFhOEMyTTRLcmVyUUtFMVhCVEhn		worked
NGIfZk43RTRDY2tkTkpveGM		individually
The second second second second		and presented
A 学说 TREE		their ideas
The state of the s		
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https://drive.google.com/drive/u/0/folders/0Ba1oAP\_eaoPfnEzbWgySTF6UWNRZGk3TVFXai1ET2g0V0lEdElz ZXM0eFp1R0QwSUhENVE



Healthy lunch
Students create
recipes and drawing
for Mr Gringling lunch
and we make a
exhibition with all of
them

Students work individually and upload photos and videos

