

Learning Scenario title

Castaway on a desert island

Educational level / Age group	Second grade /7 years old
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Country or region:	Czech Republic



Learning objectives / aspirations

- To learn how to solve problems within a narrative story via programming
- To collaborate in a group
- To follow a set of instructions
- To practice and develop reading skills



Narrative overview

In schools, we often encounter low reading literacy among pupils. Especially for younger pupils, there is great scope to develop such skills. There is room to lay the foundations of algorithmizing through a story that pupils must read and dissect in a sequence of events. We also try to use the potential of gamification to make the learning activities more engaging.

Note: *This scenario was designed by a group of 13-year-old students who came up with the idea of creating activities using the Matatalab bot for other junior pupils in their school.*



Approach to teaching and learning

Approach to teaching and learning	<ul style="list-style-type: none">• Collaborative learning• Learning through problem solving• Gamified learning
Approach to assessment	Self-assessment through finished game Teacher assessment



Roles

Teachers	<i>Helper, observer</i>
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Learners

*Students are actively involved in the learning process.
They learn collaboratively through self-discovery
They communicate, negotiate solutions and use their problem-solving skills as they go through the story at their own pace*



Learning environment

Learning activities happen in a traditional classroom at school, with a group of 24 pupils



Learning activities

Prior to lesson, the teacher needs to print out and cut the narrative text into pieces according to the students' entry levels.

First brainstorming

The lesson starts with the following question:

- "What you you know about castaways?" - Teacher writes key words on the board

Introduction to the activity:

- "You are going to rescue a castaway with the help of Matatalab bot"

Solving the problem

Students are divided in groups of 3

Each group receives the first level/part of the story and go through the text/game

They have to read the story and solve the problem

They are then invited to show the teacher how they solved it

After that, the teacher assigns another part of the story following the following sequence:

Level 1: Shipwrecked

Welcome to this desert island

Unfortunately, you got here by a ship that was wrecked

You want to get to the waterfall (A4), that's your destination.

*But you first have to go through several stations.
The first station is the beach (C1), where you are going to build a raft.
Let's do it!*

Level 2: Beach

*Great, you've made it to the beach! Now that you have built a clamp, you can now sail away!
But there's one more station to reach.
You're hungry, so you have to get across the icebergs (D1) to the ocean (D2), where you can catch a fish.
Let's find something to eat!*

Level 3: Hunger

*Great, you made it to the ocean, and you had lunch!
Oh, my Gosh! While you were sailing through the icebergs, you hit one and the pack is slowly disintegrating. You must quickly move to the nearest station.
When you get there, you will have to make a choice: either you go to the valley (D3) or to the island (C2)
Think fast but think smart!
You must reach the level that you have chosen.*

Level 4: Valley

*Congratulations, you made the right choice! You're doing great!
You are on land now.
The buoy has completely disintegrated, and you have nothing to sail on.
Your penultimate stop is in the desert (A3) where you can pick up an old map from a friend.
Now get a good night's sleep, it's going to be a long journey on foot tomorrow.*

Level 5: Island

*You're on the island again.
Unfortunately, you have nowhere else to go, so you must go back to level 1.
Good luck.*

Level 6: The final

*You've finally reached the desert and you have found the map that will help you find your way to the waterfall.
This is your last task. Get to the waterfalls (A4)
It's your last challenge to reach your destination.
Good luck!*

Level 7: Running through the goal

*Well done! You have completed all tasks. The challenge is over!
You have done a great job.
Now you can enjoy paradise on this beautiful island: have a drink and relax!
Thank you so much for a great trip!*

Reflection and debriefing

Students have to write down one part of the programme



Possible challenges

*If you teach in 45-minute lessons - it will take more than one lesson
Reflection and debriefing activities might be done in another lesson*



Resources

*A story to be printed out on paper
An original Matatalab activity plan*



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