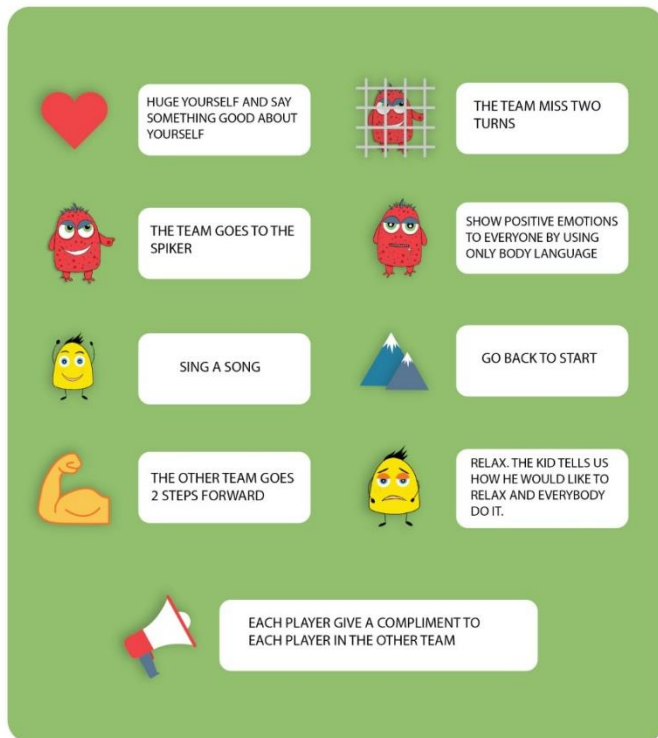


## INTRODUCTION

# KIND NET GAME



### *Name of the game*

"Kind Net" is an educational game in which, by applying computer technology (robotics) and critical thinking, students solve challenges and share experiences related to interpersonal violence (bullying) among students in the primary education.

The game was created by psychologists, pedagogues and teachers actively involved in teaching practice, within the project activities of the project "Robotics versus Bullying", co-financed by the Erasmus+ Program of the European Commission, Sub-program "Support for Policy Re-form", Action "Forward-looking cooperation projects" (612872-EPP-1-2019-1-IT-EPPKA3-PI-FORWARD).

The Robotics versus Bullying project aim is set on the implementation of STEM education – robotics, which will enable students aged 6 to 15 to make their first steps in science, technology and engineering in a fun way and through social inclusion, which will increase their digital skills, but above all the skills of

problem solving, critical thinking, experimentation and teamwork that are key in the student's life. The focus of the project activities is on improving communication, developing empathy, mutual assistance and inclusion in school educational practice, increasing cooperation between children and young people, as well as between parents, teachers and the wider community and local environment. The ultimate goal of the project activities is aimed at reducing violence between peers and the integration of different groups in social life based on positive social norms and values.

### **THE GAME - psycho-pedagogical references**

*Identify the main objectives of the game in terms of what the children can learn individually and in relationship with each other. What attitudes they can develop. Describe the role of the teacher, from a pedagogical point of view, during the game.*

Unfortunately, the bullying, as a phenomenon in the modern social life, becomes a serious social problem from a moral, physical and material aspect, especially among children and adolescents in

primary and secondary education. In every day's school practice, teachers, pedagogues, psychologists are faced with this big challenge: "What are the reasons for this phenomenon among children, and more importantly, what mechanisms and measures should be taken to deal with the problem and overcome it effectively."

Considering the fact, that game-play for children, especially in the primary education, is a basic element in their social development, it should be used as a strategy that is based on the idea that a playing game to reach specific learning objectives. In that sense, teachers can already use the Kind Net game not only as a tool for acquiring knowledge and skills in the context of teaching different subjects, but also, the activities of this games for socialization are a great way for the students to learn how to behave around their peers, and develop skills like taking turns, managing emotions, reading body language, empathy e.t.c. The game identifies the different roles that a teacher takes on throughout game-based learning processes, not only as technical/game administrator, and classroom supervisor but more important, teacher should help in promoting social interaction among students, regrouping students often to give them a chance to interact with other students, praise children and give them positive feedback for interacting with their peers in a positive manner. The more they know they are acting appropriately, the more likely they will continue to do so.

## GAME DESCRIPTION

*Introduce the game with a general description: age of the players, general aim of the game, etc.)*

The main objective of the game is to enable the children's:

- life-skills development through role playing
- cooperation and common decision-making
- identification of own and others emotions and emotional states
- critical thinking and finding possible solutions for specific problem situations from their everyday's life

The game can be played individually or in groups, with one or more robots.

By defining different game rules, the game can be adapted and implemented with students of all age groups in primary and secondary education (age 6-16).

## Description of the robot

*Describe the robot that can be used for this game.*

The game has been designed for the educational Clementoni talking robot "Sapientino SuperDOC" (it can also be used with the robots Sapientino DOC and MIND Designer). The choice of this tool is due to the fact that this product does not have a gender characterization and is well received both by males and females, especially for the age group between 4 and 8 (but also for older children at their first experiences with educational robotics). The colors are lively and cheerful, the colored lights, the music, and the friendly voice involve children and keep their attention focused on the activity. The Super DOC robot is programmable with the arrows above its head in a simple and

intuitive way. Previous experiments have shown how this robot is very useful in facilitating the inclusion of pupils with special educational needs.

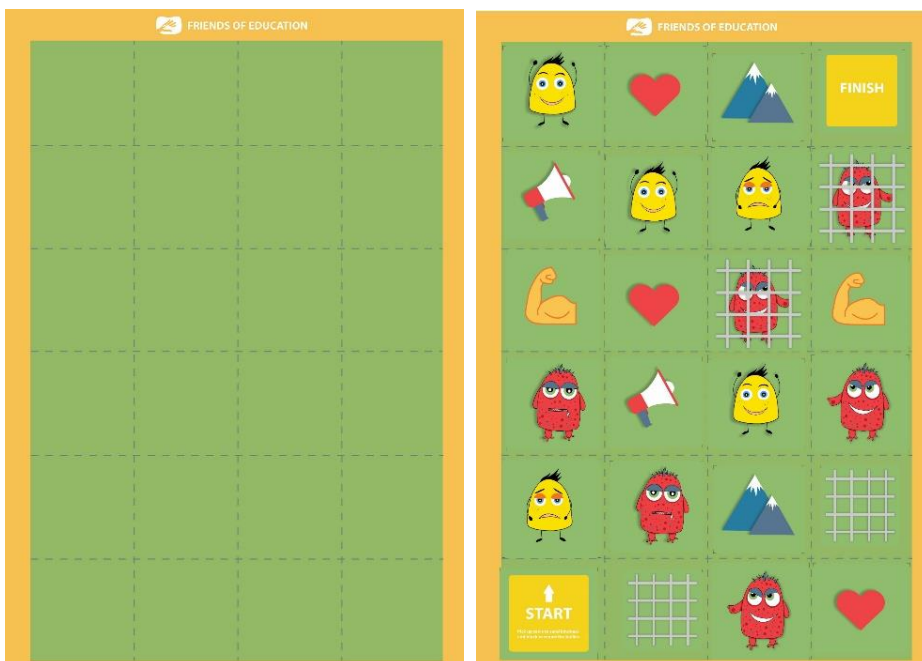
## Game content

*List all the parts required for the game*

- Mind Designer Robot (s)
- Game board with grid
- 24 emotion cards with pictures (victims and bullies, hearts, strength, flags for positive influence, obstacles, alerts, zip), with size 15cm x 15cm
- dice for playing with numbers from 1 to 6
- 12 emotion cards with pictures (victims and bullies, hearts, strength, flags for positive influence, obstacles, alerts, zip), with size 5cm x 5cm
- blank sheet of paper A2 format, to define a board with the rules of the game

## Description of the board

*Describe the game board and the different boxes.*



The game board is in form of a grid, divided into empty squares of size 15cm x 15cm. At the beginning of the game, the squares of the board are empty, then a START card, FINISH card, and one of 22 emotion cards with pictures, with size 15cm x 15cm, are randomly placed on each square.

Creating the game board is a group activity - each student draws a card from the deck of cards (which are face down) and places it on the board.

If the teacher wants to apply the game to a specific situation or adapt it to specific educational goals, she/he places the cards on the game board.

## Description of a game session

### PREPARATION

*Describe how the class is prepared for the game. How to define the division into groups, tips to allow the game to run smoothly from the start. How to prepare the platform material.*

- Depending on the number of students, the students are divided into groups/teams, randomly (e.g. by throwing a dice, drawing numbers or letters, etc.). But if the teacher

wants to apply the game to a specific situation or adapt it to specific educational goals, she/he places the cards on the game board.

## KIND NET GAME



- Each participant in the team, gets a role that she/he will have during the game play (eg who will move the robot, who writes the rules, who throws the dice, etc.). Roles are assigned by agreement in the group, but if necessary, the teacher determines the roles in order for all members to receive and bear some responsibility, or if there is a need for some of the students to learn a specific social skill, playing the game.

- Each team gets one robot to use during the game (although the game can also be played with a single robot, so that each team uses the robot one at a time). The robot/s start from the field marked START and should end with the field marked FINISH. The team members decide which way the robot will move on the game board, from the starting field START to the final field FINISH, during the game itself.

### Game rules

The rules of the game give the players direction, what they should do, when during the game, the robot stands on some field (with one of the 22 emotion cards with pictures).

For younger children (6-10 years), the teacher presents to the teams a pre-prepared board with the rules of the game and explains the rules.

For children aged (11-14 years), each team should create their own game board. The rules are defined according to the 12 emotion cards with pictures (victims and bullies, hearts, strength, flags for positive influence, obstacles, alerts, zip) with size 5cm x 5cm. The cards are glued onto the blank sheet of A2 paper, and for each card the team determines a corresponding rule, which will later be applied in the game.

For children aged (14-16 years), each team should create a board with a given situation from their daily life. They define situations according to the 12 emotion cards with pictures (victims and bullies, hearts, strength, flags for positive influence, obstacles, alerts, zip) with size 5cm x 5cm. The

cards are glued to the blank sheet of A2 paper, and for each card the team gives a brief description of some situation, for which a solution will have to be found later in the game.

## START

*Describe how the game starts, what is distributed at the beginning of the game. How the exchange sequence takes place in cases where there is more than one player ..*

1. First, the teams are formed, depending on the number of students and the learning goals
2. Each team defines its own game rules
3. The game board is set up
4. Before the beginning of the game, the teams exchange the game rules with each other
5. Each team rolls the dice and depending on the number they get, they have to program the robot to move around the fields of the game board, applying the game rules. At the same time, the team decides which path the robot will follow in order to reach the goal as quickly as possible (the field with the FINIS card).

## The Core of the Game

*Describe the process and objective of the game.*

During the game, the teams will face challenges such as: how to act if their robot has to stand on a field on which a robot from another team is standing

- Will they choose a new path to move (even though it's not optimal for their team)
- Will they decide to send the other team's robot back to the start to gain an advantage in the game?
- Will they skip that round of the game, risking another team bringing them back to the start

This way, students learn how to cooperate with each other, to show empathy, to evaluate other people's emotions and emotional states and based on that, to make a joint decision.

## CONCLUSION

*What happens at the end of the game session?*

At the end of the game, the teams discuss the rules of the game (which rules they think are fair and useful and why, and which rules they think are not good and should not be followed). Each team explains what and why they liked the most of the game, what and why they didn't like the most of the game. Also, each team explains one situation or rule that they highlight as the best and one situation or rule that they highlight as the most harmful.

## Variants

*Once the game has been described in detail, it is possible to offer variations on the main version or simplifications to make the game more accessible to younger children or those with difficulties*

By defining the rules of the game, the game can be adapted and implemented with students of all age groups in primary and secondary education (age group 6-16 years) and used to achieve educational goals in different subjects.

- For younger children (6-10 years), the teacher gives a pre-prepared board with game rules or as a group work all students create a common board with game rules.
- If the teacher wants to apply the game to a specific situation or adapt it to specific educational goals, she/he places the cards on the game board.
- Also, by using other cards and rules, the game can be adapted and applied to different teaching subjects, for learning new content, but also as a quiz for formative assessment and self-assessment.

**Keywords of this didactic proposal:**

*For example:* Critical thinking, cooperation, creative problem solving, prosocial values, bullying