FIND YOUR WAY
Teacher's manual

INTRODUCTION

"Find your way" is an educational and prosocial robotics game developed within the "Robotics versus Bullying" project, 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 partnership of the RoBy project is made up of 11 organizations from 9 European countries: public organizations, associations, research centers, universities, industries.

The Robotics versus Bullying (RoBy) Project promotes a holistic approach to learning through the use of robots, and peer cooperation as a tool to prevent bullying and promote social inclusion. This goal is achieved using robotics and digital tools. In addition, thanks to non-formal teaching and game-based activities, students aged 6 to 12 will improve their digital skills and modify their approaches to STEAM.

The educational robotics activities proposed by the RoBy project focus on the prevention of the bullying phenomenon. The robot is suggested as a tool to be used in groups, in order to improve social and communication skills in a creative, engaging, and non-judgmental environment. Working together, in a peer-collaboration, favours the development of a social environment in which bullying actions hardly find space, since the entire group of peers learn an attitude of care and protection towards all its members. The use of simple educational robots also proved useful in facilitating the inclusion of children with cognitive or behavioural difficulties and special educational needs in general.

For more information on the project and on the socio-psycho-pedagogical references on which RoBy's educational model is based, you can visit the website www.roboticsvsbullying.net

THE GAME – psycho-pedagogical references

Bullying can be seen in many situations at school and in group contexts and it is often difficult for an educator to get the people involved to bring out their experiences, or to find a way to deal with the subject using a language appropriate to the age of their students. The RoBy project partners developed the bullying prevention game as a tool for teachers to use in the classroom in order to develop pupils' awareness of what bullying is and, experiencing its dynamics firsthand, engage the students in a series of behaviors as an antidote to these social dynamics.

The main objective of the game, therefore, is to allow each pupil to understand what are the attitudes of predominance and exclusion that generate marginalization and suffering in classmates, while promoting emotional education and the ability to ask for help or to identify their strengths or weaknesses.

Through the playful activities of educational robotics, with its rules and dynamics of proximal learning space, cooperative learning, peer education, and inclusiveness, children can freely express their emotions in a "healthy" educational context and develop their own creativity by finding concrete collective and individual solutions to problems.

In the process of interaction, children often develop emotions which in most cases result in conflicts and prevarications.

The “Find your way” platform gives the possibility to recognize these emotions, see a possible action and find a solution to the difficulty that has arisen.

The game helps children develop prosocial values and recognize individual episodes of abuse by analyzing them from an emotional point of view to find solutions and avoiding repetitions of what happened. For the teacher, helping pupils to manage conflicts makes it possible to prevent the repetition of bad behaviors over time and the forming of bullying.

GAME DESCRIPTION

The game was created for children of an age group that can range from 8 to 12 years old, and it’s based on a platform that the teacher can adapt to the content. According to the age of the children and the experience acquired during the game, it is possible to ask for elaborations of different complexity by deepening the situation described in the game.

The main goal of the game is to make children think about situations where a child experiences a specific emotion due to someone else's behavior. Such a reflection will help them find a solution to the problem, which will have to be shared by all.

The Super Doc robot

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 colours are lively and cheerful, the colored lights, the music, and the friendly voice involve children and keep their attention focused on the activity. The SuperDOC 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

- Game board with grid
- Cards that contain the 4 steps, to be followed in order, necessary for playing the game:

  1. a predefined programming, which will make children discover what emotion DOC feels

  2. the question "Why does DOC feel this way?": the children will have to describe a situation that explains why DOC feels this way right now

  3. a second predefined programming, to find out what DOC's reaction is

  4. The request to find a solution to the situation.

Description of the board

The board supplied with the game, shown on the next page in reduced size, is made up of 6 columns and 4 rows, each square has the size of 15 cm. x 15 cm. to respect the movement step of the Super Doc Clementoni robots.

The colors of the graphics visually help to recognize the type of square to reach: emotions outlined in yellow; reactions / actions outlined in red; solutions / exit from situations outlined in green; the scepter of power in blue offers the possibility of recognizing strengths.

The exits are reached when there is a solution that provides the passage from one of the figures or resources proposed.

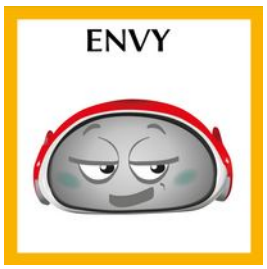
The colors of the traffic lights were deliberately used for the squares: green represents possible solutions: passing the squares of this color allows you to go towards the exits; red represents suspension, we stop on actions and reactions; and yellow warns of a situation that is changing due to an emotion.

The emotions are: rage, fright, shame, sadness, jealousy, envy.

The actions/reactions chosen are those typical in situations of panic: freezing, physical attack, isolation, verbal attack, and flight.

In a state of calm and/or normality experienced by the child, an event occurs that destabilizes them. The child freezes, exactly like animals do, and pretends to be dead in the hope that everything will subside. The verbal attack begins, the child gets nervous because they feel scared, it is one of the situations that children use most often when they are afraid of being attacked. Other reactions are fleeing away to pretend that nothing has happened, or isolating themselves, where,

in addition to not being able to understand what happened, they feel misunderstood and isolate themselves.

Emotions			
Rage		Shame	
Fright		Sadness	
Envy		Jelousy	

Actions/Reactions			
Physical Attack/ Annoy		Flight	

Verbal Attack/Teasing		Isolation	
Freeze			

Exits		
Schoolmates/neibours/ sportmates	I'm playing with my friends (at recess)	I'm walking with my friends (with schoolbag or sportbag)
		
Family (grandparents, uncles and aunts, cousins, nunny …)	I tell my parents/my nunny	I tell my siblings, my cousins
		

Reference adults have a role in the group	I tell the teacher	I report tothe coach or scout leader
		
Inner strenght, self confidence	Personal resources (self-awareness)I'm strong	Superhero,protector
		

The **resource** squares are outlined in green: they allow children to observe that they have various possibilities for relationships, as well as personal qualities, which allow them to find a solution the most suitable for them. There are four shades of green to indicate different types. Three of relational interaction: friends (from school, from games, from training); family (parents, siblings / cousins, nanny); other reference adults (teacher, coach, …). One contemplates the possibility of relying on one's inner resources: believing in oneself (self-confidence), feeling one's inner strength, relying on one's inner superhero.

The square bordered in blue represents the starting point of the game.

Description of a game session

PREPARATION

Play groups made up of 3/4 children are created, depending on the size of the class. Groups can be created by the teachers according to criteria that they deem most suitable, or freely by the children themselves.

The board is prepared according to the desired complexity: the board is shown here with complete squares, but in case you want to simplify it, you can cover the squares you don't want to use with white squares.

START

The roles are established within each group:

- the **reader**, who will have the task of reading the instructions on the card
- the **programmer**, who will be responsible for programming the Doc
- the **writer**, who will write the group's response to the requests in the paper
- the **speaker**, who will explain to the rest of the class the answers his group gave during the game

Each group moves on their own board and the game begins by placing DOC on the sceptre square.

The Core of the Game

A child (the **reader**) takes a card and communicates to the **programmer** the programming to be performed by DOC, who will stop in an emotion box.

Then he asks the first question written on the card (*Why does DOC feel this way?*) and invites the group to think of a reason why their robot friend feels this way (e.g. angry). The group must describe a situation in which someone made this happen.

> *EXAMPLE: Doc is playing in the school garden with some friends. Suddenly, a school friend hits him, pushing him several times.*

The teacher may work previously with the class to identify situations in which a child can experience bullying. This can be done working with specific books or asking the pupils directly to describe such situations. In the latter case, the pupils will describe situations close to their experience and this can lead to a class discussion on already happened events.

Then the **reader** explains again how to program the robot. The group discovers the reaction of DOC (for example verbal fight). Now they have to write (the **writer**) a possible solution to find a suitable way out. Each group decides, by mutual agreement, who to ask for help and which way out to reach, but they must respect one condition: everyone must feel comfortable and no one should feel bad.

They can use all the helpers (green squares) and when the children have chosen among the proposed resources (family, friends, known adults, their own resources) the programmer sets the path on the robot to find the way out.

CONCLUSION

At the end of the session, the readers of each group tell the stories to the rest of the class. Within the groups, roles are reversed, a new card is drawn and the game begins again.

Variants

The short story can be realized in the form of a textual story, creating comic stories with onomatopoeias.

Those who use AAC Augmentative Alternative Communication can create a story with symbols, in which case the story will be told verbally by the teacher. If the moment of presentation and reflection on the stories produced by each group cannot be created at the end of each game session, it can be postponed to the end of the lesson.

Keywords of this didactic proposal:

STORYTELLING, CREATIVE PROBLEM SOLVING, PROSOCIAL VALUES, BULLYING, RoBy