

# 03 BLUE ARROW TANGIBLE KIT AND EXERCISES

BLUE ARROW PROJECT CONSORTIUM

## O3. Blue Arrow Tangible kit and exercises

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## Introduction

This document is the deliverable of the output 3 (O3) of the Blue Arrow project. Although the kit and its components are a **software with a tangible part**, the next chapters will consist in a technical manual about design, creation and implementation of Multisensory Stories.

Please be aware, in order to use the authoring tool you must use a Windows PC.

For apply the story you create on the Blue Arrow authoring tool you need a smartphone with an Android OS and equipped with an NFC antenna.

Attention please: if you want to try an exercise you must have the NFC tags (thin adhesive sensor that you could buy in any online store) to be pasted on the object of your story.

# Enjoy!

## Template for the story editing

Following the template provided to guide teachers and educators during the design of Multisensory stories, basing on the structure co-designed during the project. The first step, before using Blue Arrow authoring tool, is to fill in the template and collect or create multimedia material and tangible objects.

### Blue Arrow template for the story editing

For a good implementation in the Blue Arrow authoring tool your need a good story. But the story is not enough!

You need to have a clear idea of all the steps of your story, what are the dialogs and then which audios you have to record, or which audios your students will record. Finally, you need to know which tangible object you need for the execution.

In order to do this task, first of all create your story and your dialogs with all of the steps filling this form. This is a scaffolding that could help you to create your story!

A story line is like this:



Download and insert your data and info

Step Number	1
Step Name	
Text 1	
Image 1	
Negative Feedback	
Tangible object target	
How you suppose to create/gather this material	

Step Number	2
Step Name	
Text 2	
Image 2	
Negative Feedback	
Tangible object target	
How you suppose to create/gather this material	

Step Number	3
-------------	---

Step Name	
Text 3	
Image 3	
Negative Feedback	
Tangible object target	
How you suppose to create/gather this material	
Step Number	4
Step Name	
Text 4	
Image 4	
Negative Feedback	
Tangible object target	
How you suppose to create/gather this material	
Step Number	5
Step Name	
Text 5	



Image 5	
Negative Feedback	
Tangible object target	
How you suppose to create/gather this material	

Please add as many steps as you need

## Open Educational Resources Created

On the website of the Blue Arrow project you could browse the Blue Arrow stories in terms of Open Educational Resources that you could see, take inspiration, download, use, reuse and readapt!

At the moment the stories are in four languages:

- English
- Italian
- Spanish/Catalan
- Albanian

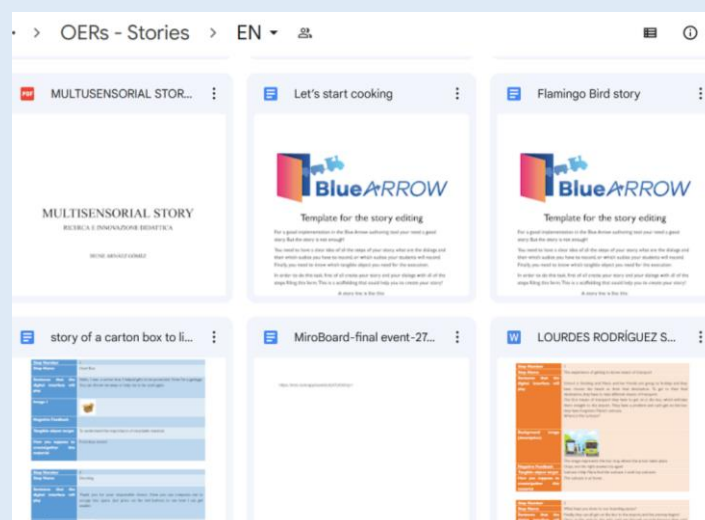
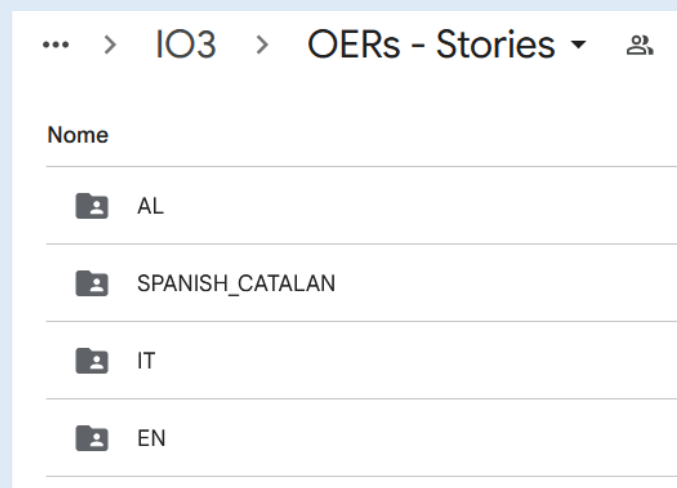


Figure: some OERs in the open repository

## Blue Arrow Tangible Kits

In the "Blue Arrow" project, kits of exemplary objects have been prepared that teachers and parents can use to develop their stories. The kits are designed in a modular way; in fact, they can be found freely on the market, or they can be self-produced. Teachers can download some kits from the project website, print and cut them out. On the figures thus created it is possible to place the NFC tag, in order to make them usable, as in the story called "My friends, the shapes".

The first kit includes 8 logic blocks and a character who acts as Alice.

The second kit is developed for the story "Six elves in my heart" and aims to stimulate emotional expression and skills. In this case the kit consists of six elves and six scented jars. Also in this case, the puppets and scented jars can be purchased or created in a do-it-yourself way, since they are composed of substances that are easy to find in homes, such as cocoa, lemon and lavender.

The third kit refers to the story "Achilles the dot" and aims to develop personal and social skills through knowledge of the body and movements. The kit consists of Achilles, the point, to which are added the parts of the body, three olfactory stimuli (rose, orange and hazelnut) and a glass of water.

### KIT 1

EUROPEAN KEY COMPETENCIES*	Mathematical competence	
SCHOOL GRADE	FRAMEWORK	SPECIFIC EDUCATIONAL OBJECTIVE
PRE-PRIMARY SCHOOL (3-6 years)	<p style="text-align: center;">KNOWLEDGE OF THE WORLD</p> <p>Children should learn how to group and order objects and materials according to different criteria; to identify some properties; to compare and evaluate quantities; to use symbols to register them; to</p>	<p style="text-align: center;">NUMBER AND SPACE – IDENTIFY GEOMETRICAL AND TRIDIMENSIONAL OBJECTS PROPERTIES</p> <p>Children should learn how to describe the shapes of three-dimensional objects, recognizing geometric shapes</p>

	perform measurements using tools within his reach.	and identifying their properties (for example, recognizing in the "square" a property of the object and not the object itself).
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\* European Commission - Key competences for lifelong learning (2019)  
<https://data.europa.eu/doi/10.2766/291008>

Story abstract

**Title: "My friends, the shapes"**

The story "My friends, the shapes" presents the main character, Alice, and her friends, the shapes with different colors and sizes; the story is designed to stimulate the recognition and discrimination of geometric shapes and figures, and the ability to classify them based on size and color.

The basic objects kit consists of logic blocks (Z. P. Dienes), with the possibility of extending it for more complex versions of the story, but it is also possible to use objects created by users, such as cards to cut out and color. In addition to the 4 basic shapes of the story, 4 other shapes of different sizes and colors may be present on the playground that serve to stimulate the exploration and discrimination of the properties of the objects.

At the end of the story, it is possible to stimulate the recognition in the environment of shapes equal to those of the story, as objects of common use (e.g. round coasters).

Kit materials

HOMEMADE	TO BUY
<ul style="list-style-type: none"> <li>• <b>Shapes:</b> Colored or coloring cards to download, cut and laminate. Fixed story shapes:               <ul style="list-style-type: none"> <li>○ small blue square</li> <li>○ small red rectangle</li> <li>○ large yellow triangle</li> <li>○ large blue circle</li> </ul> <p>Remaining shapes can be coloured differently, es:</p> <ul style="list-style-type: none"> <li>○ small yellow triangle</li> <li>○ small blue circle</li> <li>○ large blue square</li> <li>○ large red rectangle</li> </ul> </li> <li>• <b>Character (Alice):</b> <ul style="list-style-type: none"> <li>○ image on cardboard to download, cut and laminate</li> <li>○ or any doll / puppet</li> <li>○ or a drawing</li> <li>○ or created puppet (e.g. with toilet paper roll)</li> <li>○</li> </ul> </li> </ul> <p><i>* see Annex 1</i></p>	<ul style="list-style-type: none"> <li>• <b>Shapes:</b> Logic Blocks  <a href="https://www.amazon.it/EDX-attivita%3%A0-Triangoli-Quadrati-rettangoli/dp/B00U69TV8M">https://www.amazon.it/EDX-attivita%3%A0-Triangoli-Quadrati-rettangoli/dp/B00U69TV8M</a> </li> <li>• <b>Character (Alice)</b>  <a href="https://www.amazon.it/Playtee-Famiglia-Bambole-Pupazzi-Flessibili/dp/B074TY37BK">https://www.amazon.it/Playtee-Famiglia-Bambole-Pupazzi-Flessibili/dp/B074TY37BK</a> </li> </ul>
<ul style="list-style-type: none"> <li>• Tag NFC (40 cent/x1)</li> </ul>	

## Storyboard

### INTRODUCTION

**Narrator:** *Hi, this is the story "My friends, the shapes". Do you want to start? Put Alice on the board!*

Object: Character (Alice)

### SCENE 1

Narrator: Here is Alice, a little girl who has friends all of different shapes and colors. Together they have a lot of fun. Alice and the shapes are playing in the garden when suddenly ...

Alice: What a wind out here! Look there is a tornado !!! [noise of strong wind]

Narrator: Oh no, the wind is so strong it took away the colors of the shapes! They really need you to find them!

Square:

I am Square and I am perfect

I look like a handkerchief

I'm blue and small

I could call myself Little Square

Narrator: Can you find Square? Place it on the board, remember it's blue and small!

**Object: small blue square**

Right object feedback: Well, Square has its blue color again! [GO TO SCENE 2]

Wrong object feedback: Try again! Can you find Square? Place it on the board, remember it's blue and small!

### SCENE 2

Square: If I stretch a little bit

I become like my friend Little Rectangle

Rectangle: I am Rectangle, small and red like a tomato

When I'm not playing, I draw and paint

Narrator: Rectangle is red and small; can you find it?

**Object: small red rectangle**

Right object feedback: Well, Rectangle has its red color again! [GO TO SCENE 3]

Wrong object feedback: Try again! Rectangle is red and small; can you find it?

### SCENE 3

Triangle: Triangle they called me

From three points I am formed

I'm a little bit edgy

But I'm not dangerous

Yellow and big have created me

Shiny and smooth on each side

Narrator: How about finding the triangle? It is yellow and large!

**Object: large yellow triangle**

Right object feedback: Well, Triangle has its yellow color again! [GO TO SCENE 4]

Wrong object feedback: Try again! How about finding the triangle? It is yellow and large!

### SCENE 4

Circle: I am Circle and I am round

I often travel around the beautiful world

Round trip on a bicycle

By car or motorcycle

I'm also blue just like Square

But I'm not small at all, I'm big of course!

Narrator: Can you find Circle? It's blue and big

**Object: large blue circle**

Right object feedback: Well, Circle has its blue color again! [GO TO FINAL SCENE]

Wrong object feedback: Try again! Can you find Circle? It's blue and big

## FINAL SCENE

Narrator: Good job, thanks to you all shapes have regained their colors! Now they can return to play together with Alice!

[BACK TO HOMPAGE]



KIT 2

EUROPEAN KEY COMPETENCIES*	Cultural awareness and expression competence	
SCHOOL GRADE	FRAMEWORK	SPECIFIC EDUCATIONAL OBJECTIVE
<p>PRE-PRIMARY AND PRIMARY SCHOOL (5-6 years)</p>	<p><b>EMOTIONAL COMPETENCE</b></p> <p>At the end of kindergarten, it is reasonable to expect that each child has developed some basic skills that structure his personal growth, among which he recognizes and expresses his emotions, is aware of desires and fears, feels the states of soul of oneself and of others.</p>	<p><b>RECOGNIZE EMOTIONS</b></p> <p>The psychologist Daniel Goleman (1996) spread the concept of emotional intelligence: it is a crucial tool for being aware of oneself and one's life choices, for self-motivation and resilience in the face of stressful situations, for acquiring good interpersonal skills; it is therefore essential that it is trained from the first years of school.</p> <p>A good emotional education should stimulate emotional awareness and avoid emotional masking: to learn to guide their emotions, the child must first recognize them and then be sure that he can afford to feel them. It is about the validation of emotion and experience. The child must learn that the emotional experience he experiences was also experienced by others, that it must be recognized and expressed, that it is a human</p>

		fact, a human experience, which is not "strange".
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\* European Commission - Key competences for lifelong learning (2019)

<https://data.europa.eu/doi/10.2766/291008>

Goleman, D. (1996). Emotional intelligence. Why it can matter more than IQ. Learning, 24(6), 49-50.

Story abstract

**Title: " Six elves in my heart "**

The story "Six elves in my heart" is designed for the recognition of emotions and emotional validation. The main objective is that the child learns to discriminate between the 6 primary emotions and their characteristics and, together with the protagonist Tommy, understands how fundamental it is not to repress emotions, rather it is good to accept them, make them emerge and understand them when there is any need, also showing what the risks of denying them might be.

Kit materials

HOMEMADE	TO BUY
<ul style="list-style-type: none"> <li>• <b>Characters</b> (Tommy, Indifference the Witch, 6 elves):               <ul style="list-style-type: none"> <li>○ image on cardboard</li> <li>○ or any dolls / puppets</li> <li>○ or drawings based on characters emotions</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Characters</b> (Tommy)               <ul style="list-style-type: none"> <li>○ <a href="https://www.amazon.it/Wagoog-Bambole-Famiglia-Persone-Giocattolo/dp/B08LY4SLJP/ref=sr_1_49?_mk_it_IT=%C3%85M%C3%85%C5%BD%C3%95%C3%91&amp;crid=1B0UFLFCMAGV3&amp;keywords=ba">https://www.amazon.it/Wagoog-Bambole-Famiglia-Persone-Giocattolo/dp/B08LY4SLJP/ref=sr_1_49?_mk_it_IT=%C3%85M%C3%85%C5%BD%C3%95%C3%91&amp;crid=1B0UFLFCMAGV3&amp;keywords=ba</a></li> </ul> </li> </ul>

<ul style="list-style-type: none"> <li>○ or created puppets (e.g. with toilet paper roll)</li> <li>• <b>3 jars/glass with odors:</b> <ul style="list-style-type: none"> <li>▪ piece of chocolate/cocoa powder,</li> <li>▪ lemon zest,</li> <li>▪ lavender bag.</li> </ul> </li> </ul> <p><i>* see Annex 2</i></p>	<p><a href="https://www.amazon.it/s?k=bambola+legno&amp;qid=1649166406&amp;s=toys&amp;sprefix=bambola+legno%2Ctoys%2C115&amp;sr=1-49">mbola+legno&amp;qid=1649166406&amp;s=toys&amp;sprefix=bambola+legno%2Ctoys%2C115&amp;sr=1-49</a></p> <p>or plastified card</p> <ul style="list-style-type: none"> <li>• <b>Characters</b> (Indifference the Witch)       <p><a href="https://www.amazon.it/Freljorder-bambola-Halloween-fantasma-fascino/dp/B09GVHM8QX/ref=sr_1_33?mk_it_IT=%C3%85M%C3%85%C5%BD%C3%95%C3%91&amp;crd=2EASD311L5MYG&amp;keywords=bambola+strega&amp;qid=1649166526&amp;refinements=p_36%3A490261031&amp;rnid=490259031&amp;s=toys&amp;sprefix=bambola+strega%2Ctoys%2C118&amp;sr=1-33">https://www.amazon.it/Freljorder-bambola-Halloween-fantasma-fascino/dp/B09GVHM8QX/ref=sr_1_33? mk it IT=%C3%85M%C3%85%C5%BD%C3%95%C3%91&amp;crd=2EASD311L5MYG&amp;keywords=bambola+strega&amp;qid=1649166526&amp;refinements=p_36%3A490261031&amp;rnid=490259031&amp;s=toys&amp;sprefix=bambola+strega%2Ctoys%2C118&amp;sr=1-33</a></p> </li> </ul> <p>or plastified card</p> <ul style="list-style-type: none"> <li>• <b>Characters</b> (6 Elves): plastified cards</li> <li>• <b>3 jars with odors</b> of chocolate, lemon, lavender:       <p><a href="https://www.amazon.it/Sentosphere-La-Tombola-degli-Odori/dp/B000S2R9PE/ref=asc_df_B000S2R9PE/?tag=googshopit-21&amp;linkCode=df0&amp;hvadid=90679127100&amp;hvpos=&amp;hvnetw=g&amp;hvrand=3179957158779665581&amp;hvpon=&amp;hvptwo=&amp;hvqmt=&amp;hvdev=c&amp;hvdcmdl=&amp;hvlocint=&amp;hvlocphy=20574&amp;hvtargid=pla-79038880886&amp;psc=1">https://www.amazon.it/Sentosphere-La-Tombola-degli-Odori/dp/B000S2R9PE/ref=asc_df_B000S2R9PE/?tag=googshopit-21&amp;linkCode=df0&amp;hvadid=90679127100&amp;hvpos=&amp;hvnetw=g&amp;hvrand=3179957158779665581&amp;hvpon=&amp;hvptwo=&amp;hvqmt=&amp;hvdev=c&amp;hvdcmdl=&amp;hvlocint=&amp;hvlocphy=20574&amp;hvtargid=pla-79038880886&amp;psc=1</a></p> </li> </ul>
<ul style="list-style-type: none"> <li>• <b>Tag NFC</b> (40 cent/x1)</li> </ul>	

## Storyboard

### INTRODUCTION

Narrator: Hi, this is the "Six elves in my heart" story. Do you want to start? Put Tommy on the board!

**Object: character (Tommy)**

Right object feedback: Let's start [Tommy's picture] [GO TO SCENE 1]

Wrong object feedback: Let's find Tommy and start the story!

### SCENE 1

Narrator: Once upon a time there was Tommy, such a sensitive child! Tommy had a round and slightly chubby face, very pale skin and a sprinkle of freckles on his nose, he loved playing video games, he loved ice cream and chocolate cakes.

Find the smell of the chocolate cake and place it on the board.

**Object: chocolate smell**

Right object feedback: Sniff, what a good smell! [*Cake image*] [GO TO SCENE 2]

Wrong object feedback: Try again! Find the smell of the chocolate cake and place it on the board.

### SCENE 2

Narrator: Tommy often cried and often had red cheeks. The teacher, the mother, the father, the sister Martina claimed that he was too sensitive a child. His comrades made fun of him. Tommy was tired of always being told by adults that he is too sensitive a child, and he thought that sensitivity was something wrong, something to be ashamed of, until one day while he was crying, a tiny elf came out of his eyes instead of tears, so he discovered that his heart was inhabited by six tiny elves. One was Happy boy, and he was always in a very good mood. He dressed in colors borrowed from the sun. He knew the secret of happiness.

Find Happy boy and place it on the board.

**Object: Happy elf**

Right object feedback: Well, this is Happy Boy! [*Happy elf picture*] [GO TO SCENE 3]

Wrong object feedback: Try again! Find Happy boy and place it on the board.

### SCENE 3

Narrator: Trembling boy was a little bit coward. He thought the world was full of dangers. His green clothes could change color to blend in.

Find Trembling boy and place it on the board.

**Object: Fear elf**

Right object feedback: Well, this is Trembling boy! [*Fear elf picture*] [GO TO SCENE 4]

Wrong object feedback: Try again! Find Trembling boy and place it on the board.

### SCENE 4

Narrator: Tearful boy was always very sad. His eyes were always wet and his mouth turned downwards. He wore dark blue.

Find Tearful boy and place it on the board.

**Object: Tearful boy**

Right object feedback: Well, this is Tearful boy! [*Tearful elf picture*] [GO TO SCENE 5]

Wrong object feedback: Try again! Find Tearful boy and place it on the board.

### SCENE 5

Narrator: Wonder boy was a dreamer. With the nose up and the eyes wide open. Her dress was painted in all shades of the sky.

Find Wonder boy and place him on the board.

Object: Wonder boy

Right object feedback: Well, this is Wonder boy! [*Wonder elf picture*] [GO TO SCENE 6]

Wrong object feedback: Try again! Find Wonder boy and place him on the board.

## SCENE 6

Narrator: Angry Boy was very nervous. He was always convinced that he was on the side of reason. The color of her dress was red like her face when she went on a rampage.

Find Angry Boy and place it on the board.

Object: Angry boy

Right object feedback: Well, this is Angry Boy! [*Angry boy picture*] [GO TO SCENE 7]

Wrong object feedback: Try again! Find Angry Boy and place it on the board.

## SCENE 7

Narrator: Picky Boy was a neat and tidy elf who disgusted everything. He always wore white and washed constantly.

Can you find Picky Boy? Put it on the board.

Object: Picky boy

Right object feedback: Well, this is Picky boy! [*Picky elf picture*] [GO TO SCENE 8]

Wrong object feedback: Try again! Can you find Picky boy? Put it on the board.

## SCENE 8

Narrator: Tommy understood that the elves were the culprits of his excessive sensitivity! He had to get rid of them and decided to ask the witch Indifference for help.

Tommy: Indifference, please, get these elves out of my heart, I'll give you whatever you want.

Indifference [with an evil voice]: Okay Tommy, I'll do it, to make the magic potion but I need the acid essence of lemon!

Narrator: Do you want to help the witch brew the magic potion to get the elves out of Tommy's heart?

If you want to find the smell of lemon and place it on the board. Otherwise, find the smell of lavender and place it on the board.

**Objects: lemon smell or lavender smell**

Lemon smell feedback: [GO TO SCENE 9.1]

Lavender smell feedback: [GO TO SCENE 9.2]

### SCENE 9.1

Indifference: Now I have everything I need,

Bat tears

Lion roar

There is no place for emotion here!

Cow yawn

Wildebeest sigh

Sleep elf, fall down!

Narrator: The next morning Tommy felt empty; he looked for his friend Indifference and after a while he discovered the truth: the elves had gone and the witch had taken their place; now she was at the bottom of his heart. Tommy no longer felt any emotion and no longer had friends. Without Trembling boy he was so fearless that one day he climbed the fence of the lions' cage, fell to the ground and was taken to the hospital. Without Picky boy he was no longer disgusted and another day he found a worm on the street and swallowed it, ending up back in the hospital with a horrible stomach-ache! Without Happy boy he could not have fun playing with his companions.

If you want to change your choice, choose the smell of lavender and place it on the board, otherwise place Tommy on the tablet to end the story.

**Objects: lavender smell or tommy**

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O1. *Pedagogical framework for Teacher Education on distance teaching*

Lavender smell feedback: [GO TO SCENE 9.2]

Feedback Tommy: [GO TO FINAL SCENE]

Feedback from another object: If you want to change your choice, choose the smell of lavender and place it on the board, otherwise place Tommy on the tablet to end the story.

## SCENE 9.2

Indifference: Poor me, I can't complete the potion anymore!

Narrator: The elves stayed in Tommy's heart and luckily! Without those elves and their emotions Tommy would have gotten into a lot of trouble! At the zoo, without fear, he would have climbed over the fence of the lions' cage and risked being devoured by them! Or without the disgust he would have tasted a worm and ended up in the hospital! Without sadness he would not have been able to understand his companions when they would be sad or rejoice with them playing hide and seek and other games!

You made Tommy understand how important emotions are and that it is good that the elves remain in his heart. If you want to change your choice, choose the lemon smell and place it on the board otherwise place Tommy on the tablet to end the story.

OBJECTS: LEMON OR TOMMY SMELL

Lemon smell feedback: [GO TO SCENE 9.1]

Feedback Tommy: [GO TO FINAL SCENE]

Feedback from another object: if you want to change your choice, choose the smell of lavender and place it on the board, otherwise place Tommy on the tablet to end the story.

## FINAL SCENE

Narrator: The story of the elves ends here. Thanks for listening and see you soon!



KIT 3

EUROPEAN KEY COMPETENCIES*	Personal, social and learning to learn competence	
SCHOOL GRADE	FRAMEWORK	SPECIFIC EDUCATIONAL OBJECTIVE
<p>PRE-PRIMARY SCHOOL (3-6 years)</p>	<p><b>KNOW YOURSELF</b></p> <p>Children become aware of their own body, using it as an instrument of self-knowledge in the world. They recognize their own body, its different parts and represent the body still and in motion.</p>	<p><b>THE BODY AND THE MOVEMENT – GROWTH</b></p> <p>The body contains cognitive, affective, expressive, and relational codes. The knowledge of one's own body, therefore, offers children the opportunity to interpret and "read" their own codes, to know their emotions better and to become aware of themselves, even in relation to others.</p> <p>On the other hand, the core of identity originates in the body image and awareness of one's own body self.</p> <p>Corporeity and movement represent real tools of discovery and development which contribute to the global maturation of the personality.</p> <p>Thanks to specific educational activities, the child begins to graphically represent the human figure. He gets to know the body and its elements, as well as the functions of the body:</p>

		gestures, movements, expressions.
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<https://data.europa.eu/doi/10.2766/291008>

Story abstract

**Title: “Achilles the dot”**

The story starts with a blue dot in the middle of a white sheet. Soon that dot changes, it becomes an eye that looks around attentively, curiously. The desire to know, to explore, is so great that the eyes become two. So slowly, piece by piece, Achille forms his shape. The story of Achilles and his body is a metaphor for growth. Every part of Achilles' body is generated every time it encounters a new need, a desire, a goal: to host the eyes you need a head, to pronounce your name a mouth, to move long and fast legs, to pick some fruit from a tree you need arms, to smell a perfume you need a nose, to hear your voice you need two ears, and so on. Achille is therefore born and grows, he builds himself, changes, adapts to the experience of the world around him. Precisely through this confrontation, he acquires greater self-awareness, he understands what is indispensable to him.

Kit materials

HOMEMADE	TO BUY
<ul style="list-style-type: none"> <li>• <b>Dot</b> (small blue circle card)</li> <li>• <b>Parts of the body</b> (drawings, cards):</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Dot</b> (small blue circle card or logic block)</li> </ul>

<ul style="list-style-type: none"> <li>○ image on cardboard</li> <li>○ or drawings based on body parts</li> <li>• <b>3 jars/glass with odors:</b> <ul style="list-style-type: none"> <li>▪ rose candies,</li> <li>▪ orange zest,</li> <li>▪ hazelnut</li> </ul> </li> <li>• <b>Glass of water</b> (possibly closed container)</li> </ul> <p><i>* see Annex 3</i></p>	<ul style="list-style-type: none"> <li>• <b>Parts of the body</b>  <a href="https://www.amazon.it/Clementoni-11981-Il-Corpo-Umano/dp/B01NAVDSUM/ref=pd_sbs_4/262-8074881-8401347?pd_rd_w=XTAYA&amp;pf_rd_p=9e2595da-a056-4a53-aec4-cd237f94998d&amp;pf_rd_r=DRCJY31P44QKD1R10KK9&amp;pd_rd_r=6fee4d06-77b0-4f05-bfe8-c71d1ca86998&amp;pd_rd_wg=fk170&amp;pd_rd_i=B01NAVDSUM&amp;th=1">https://www.amazon.it/Clementoni-11981-Il-Corpo-Umano/dp/B01NAVDSUM/ref=pd_sbs_4/262-8074881-8401347?pd_rd_w=XTAYA&amp;pf_rd_p=9e2595da-a056-4a53-aec4-cd237f94998d&amp;pf_rd_r=DRCJY31P44QKD1R10KK9&amp;pd_rd_r=6fee4d06-77b0-4f05-bfe8-c71d1ca86998&amp;pd_rd_wg=fk170&amp;pd_rd_i=B01NAVDSUM&amp;th=1</a> / <a href="https://www.amazon.it/Small-Puzzle-Legno-Anatomia-5814/dp/B00F526PTS/ref=pd_sbs_1/262-8074881-8401347?pd_rd_w=XTAYA&amp;pf_rd_p=9e2595da-a056-4a53-aec4-cd237f94998d&amp;pf_rd_r=DRCJY31P44QKD1R10KK9&amp;pd_rd_r=6fee4d06-77b0-4f05-bfe8-c71d1ca86998&amp;pd_rd_wg=fk170&amp;pd_rd_i=B00F526PTS&amp;psc=1">https://www.amazon.it/Small-Puzzle-Legno-Anatomia-5814/dp/B00F526PTS/ref=pd_sbs_1/262-8074881-8401347?pd_rd_w=XTAYA&amp;pf_rd_p=9e2595da-a056-4a53-aec4-cd237f94998d&amp;pf_rd_r=DRCJY31P44QKD1R10KK9&amp;pd_rd_r=6fee4d06-77b0-4f05-bfe8-c71d1ca86998&amp;pd_rd_wg=fk170&amp;pd_rd_i=B00F526PTS&amp;psc=1</a>)</li> <li>• <b>Odor jars/glasses of rose, orange, hazelnut</b>  <a href="https://www.amazon.it/Sentosphere-La-Tombola-degli-Odori/dp/B000S2R9PE/ref=asc_df_B000S2R9PE/?tag=googshopit-21&amp;linkCode=df0&amp;hvadid=90679127100&amp;hvpos=&amp;hvnetw=g&amp;hvrand=3179957158779665581&amp;hvpon e=&amp;hvptwo=&amp;hvqmt=&amp;hvdev=c&amp;hvdcmdl=&amp;hvlocint=&amp;hvlocphy=20574&amp;hvtargid=pla-79038880886&amp;psc=1">https://www.amazon.it/Sentosphere-La-Tombola-degli-Odori/dp/B000S2R9PE/ref=asc_df_B000S2R9PE/?tag=googshopit-21&amp;linkCode=df0&amp;hvadid=90679127100&amp;hvpos=&amp;hvnetw=g&amp;hvrand=3179957158779665581&amp;hvpon e=&amp;hvptwo=&amp;hvqmt=&amp;hvdev=c&amp;hvdcmdl=&amp;hvlocint=&amp;hvlocphy=20574&amp;hvtargid=pla-79038880886&amp;psc=1</a></li> <li>• <b>Glass of water</b> (possibly closed container)</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Tag NFC (40 cent/x1)</b></li> </ul>	

## Storyboard

### INTRODUCTION

Narrator: Hi, this is the story of "Achilles the dot". Do you want to start? Place the dot on the board!

#### Object: Dot

Right object feedback: Let's start [*Dot picture*] [GO TO SCENE 1]

Wrong object feedback: Place the dot on the board!

### SCENE 1

Narrator: In the middle of a blank sheet with no drawings or traces, there was a dot. It was clear, almost transparent ... The sun crossed it like a body of water. Gradually the dot colored and turned into a blue eye. The eye looked around with such attention that it was soon no longer enough and doubled. So, there were two blue eyes scanning the horizon, but it began to rain, and the eyes wanted to cover themselves with a Head.

Find the head and place it on the board.

#### Object: Head

Right Object Feedback: [*Head Picture*] [GO TO SCENE 2]

Wrong object Feedback: Not quite the right one. Find the head and place it on the board.

### SCENE 2

Narrator: With his head and eyes, the dot as well as looking, he could now think! So, he decided to give himself a name: "I'll be called Achilles, or rather, my name is Achille!" And in the effort to call himself, he made his Mouth grow. Achille was curious and wanted to travel the world, with a little effort, he made two legs grow, he wanted them all in one piece so that they were more resistant.

Find a Leg and place it on the board.

**Object: Leg**

Right Object Feedback: [*Legs picture*] [GO TO SCENE 3]

Wrong Item Feedback: Not quite the right one. Find the leg and place it on the board.

**SCENE 3**

Narrator: He intended to explore the world and encounter something extraordinary. If not, what were the eyes, head, mouth and legs for? Immediately after, seeing a flower, he discovers that he needs a nose, to smell a rose and... a long, long nose comes out !!!

Find the smell of rose and place it on the board.

**Object: Rose smell**

Right object Feedback: [*Nose picture*] [GO TO SCENE 4]

Wrong object Feedback: Not quite the right one. Find the smell of rose and place it on the board.

**SCENE 4**

Narrator: Achilles realizes he is hungry and grows two arms to take a pear from the tree, but since they don't arrive, he also grows his Hands that grab the pear !!!

Find an arm and put it on the board.

**Object: Arm**

Right object Feedback: [*Arms picture*] [GO TO SCENE 5]

Wrong object Feedback: Not quite the right one. Find an arm and rest it on the board.

**SCENE 5**

Narrator: Once he has eaten, he is happy and starts singing, but he does not have the ears to listen to himself and so ... he also makes his Ears grow. Then, he stops to listen

to the murmur of the stream water and wanted to drink the water ... so it takes two cupped hands then stops to rest.

Find the glass of water and place it on the board!

**Object: Glass of water**

Right object Feedback: [*Ears picture*] [GO TO SCENE 6]

Wrong object Feedback: Not quite the right one. Find the glass of water and place it on the board.

**SCENA 6**

Narrator: Look ... There is a colored ball there !!! Achilles wants to kick, so he grows two feet at the end of his legs. Finally, Achille also grows his bust.

Find the bust and place it on the board!

**Object: Bust**

Right object Feedback: [*Bust picture*] [GO TO FINAL SCENE]

Wrong object Feedback: Not quite the right one. Find the bust and place it on the board.

**FINAL SCENE**

Narrator: Now Achilles is finally happy !!!

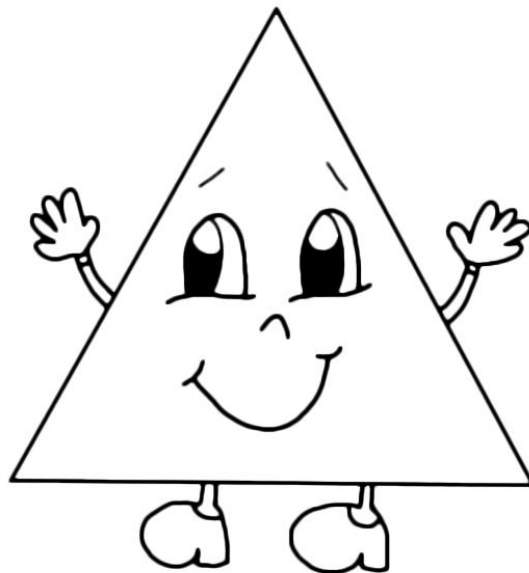
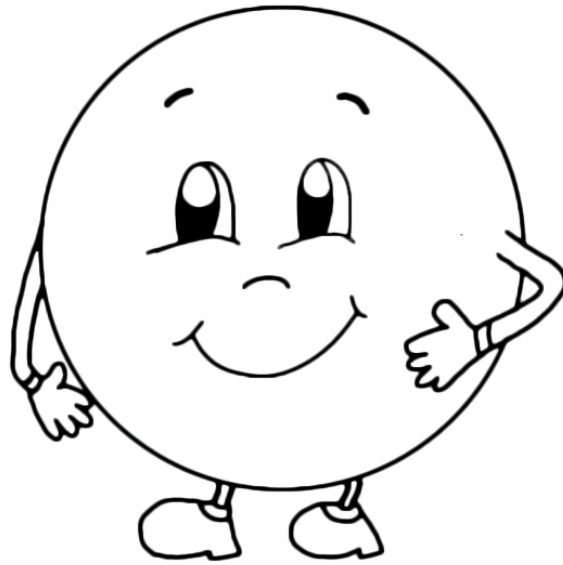
He has touched and known many things ... In the end, do you know who he meets? Look there... many dots !!! What do you think they will do?

The story ends here, thanks for listening, see you soon!

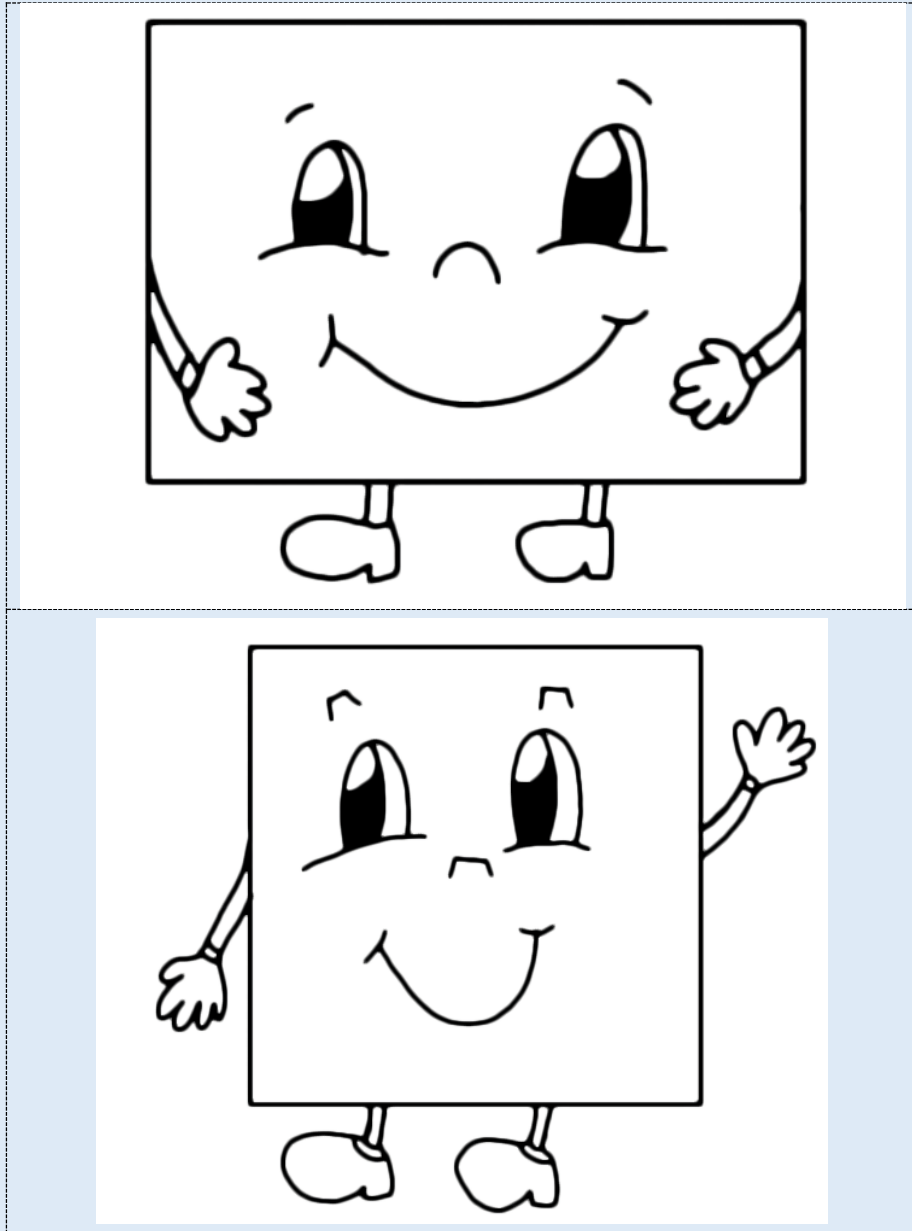


ANNEX 1

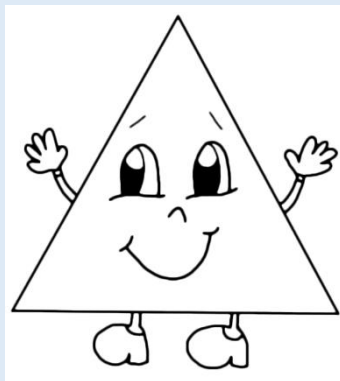
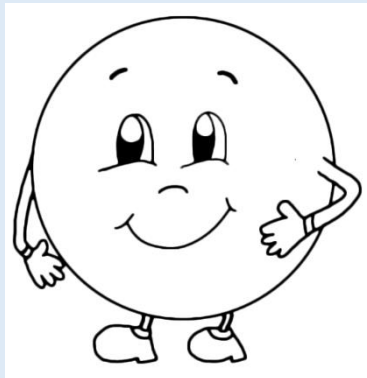
BIG SHAPES

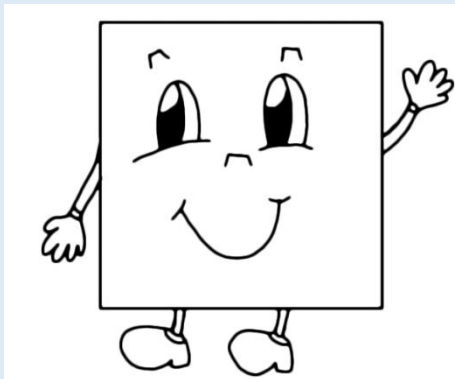
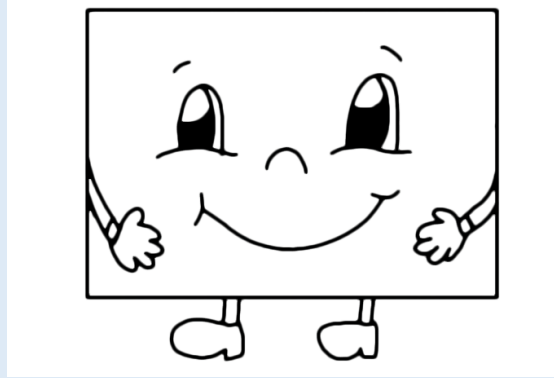






SMALL SHAPES







ANNEX 2







## HOW TO CREATE SMELLS JARS

To create smells jars you can use small paper cups (Fig. 1) in which to insert fragrances. In the case of the story *"Six elves in my heart"* you can create:

- 1 cup with chocolate/cocoa powder,
- 1 cup with lemon zest,
- 1 cup with lavender bag

The small NFC tag can be applied under the cups.

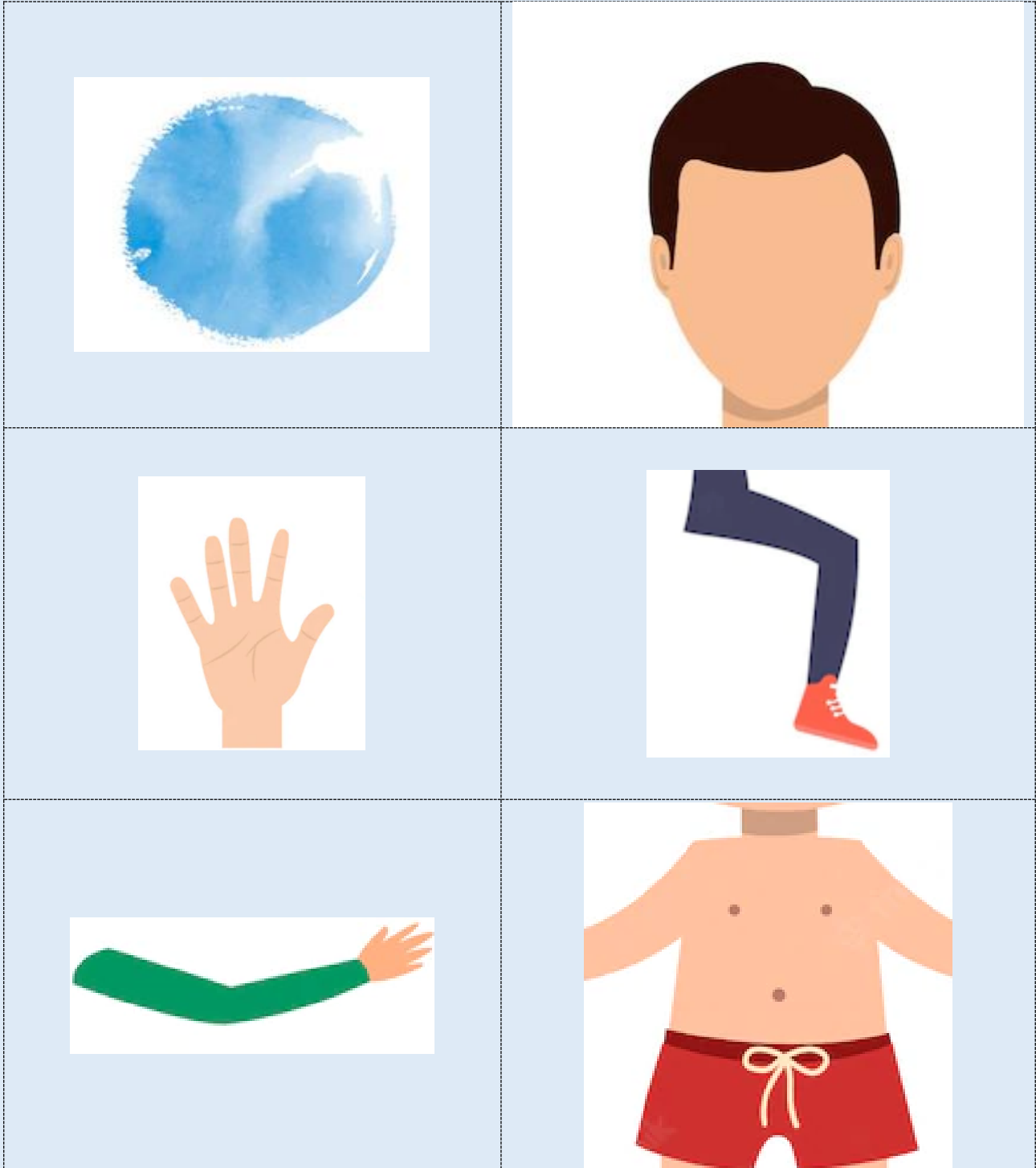


*Figure 1 Paper cup*





ANNEX 3





## Blue Arrow Authoring tool

Blue Arrow authoring tool (<https://www.bluearrowproject.eu/wp/o3/>) is a Software developed for Windows devices. It has the main goal to allow teachers and educators to easily and intuitively create **augmented and multisensory stories**. The output is a learning experience ready to be used, involving both digital and tangible dimensions. The great strength is the opportunity for teachers to easily create an output based on specific educational and inclusive needs. The highly customized learning experience and the potential involvement of all senses work together to increase engagement and motivation enhancing the learning process.

The software is **open and free** for every user, available for download at the project website<sup>1</sup>, together with a kit to create multisensory stories and their smart objects in a guided way. Moreover, a template file is available to design the story structure before implementing it using the Authoring tool. Also, on the website can be easily found tutorials about software installation procedure and the main features to create multisensory stories and to enhance any kind of object with NFC technology.

The Blue Arrow kit, all the video tutorials and the Multisensory story template are useful material for teachers to increase their familiarity with multisensory stories before using the authoring tool software to design and implement them.

Each story is based on the same structure:

- **A cover:** an introductory scene to the story, displaying the title of the story, a background picture and a first audio file to introduce the final user to the learning experience.
- **The scenes:** they can be intended as the chapter of the story or all the turning points. Each scene is composed of multimedia material (text, background picture and audio files) and it is linked to a smart object (a tangible object enhanced with NFC technology).
- **The final scene:** the ending of the story.

The only way to proceed with the story moving from a scene to another is the **direct interaction** between the user and the digital interface through the smart objects: in each scene of the story, the narrator or the characters will ask the user to find a specific smart object and put it close to the RFID antenna.

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<sup>1</sup> <https://www.bluearrowproject.eu/wp/o3/>

The software is designed to be intuitive and simple to use for teachers. It presents an immediate interface and constant access to tips or video tutorials, helping the user to explore and use the software in the best and most effective way.

The authoring tool has been implemented using STELT (Smart Technologies to Enhance Learning and Teaching), a Smarted middleware used to effectively link the digital experience to real life objects, using NFC technology, to produce output such as the multisensory stories.

The software can be used in all Partners languages (Italian, Spanish, Albanian, Dutch) and English.



Figure 1. Blue Arrow Authoring tool, section 1.

First, the user can choose to create a new story or open one from their library to continue editing it (Figure 1). Both choices lead the user to the editing section. In this section (Figure 2) the main goal is to upload all the multimedia material of both the cover and the scenes, previously collected or created. So, each scene can be easily created putting together: a background picture, an audio file telling the story and asking for the user's direct interaction, a short text to be shown on the user's screen and customizable negative feedback. An important step is the choice of NFC codes: each scene must be linked to a three-digit code that the user can choose from a list. This code will be the same with which the user will tag the NFC sensor applied on the smart object chosen for the interaction with that scene.



Figure 2. Blue Arrow Authoring tool, editing section.

Once the uploading procedure is completed and the user satisfied with their choices, the story can be saved and easily exported to an Android smartphone. A simple click on the “Export” button will transfer the multisensory story to the android smartphone connected to the windows device with a USB cable connection.

Now the story can be played on the smartphone that will be used also to read the NFC tags in smart objects, thanks to the integrated RFID antenna.

Each story is not immutable: Open library feature helps the user to edit the previously created multisensory stories or to continue their implementation in different times.

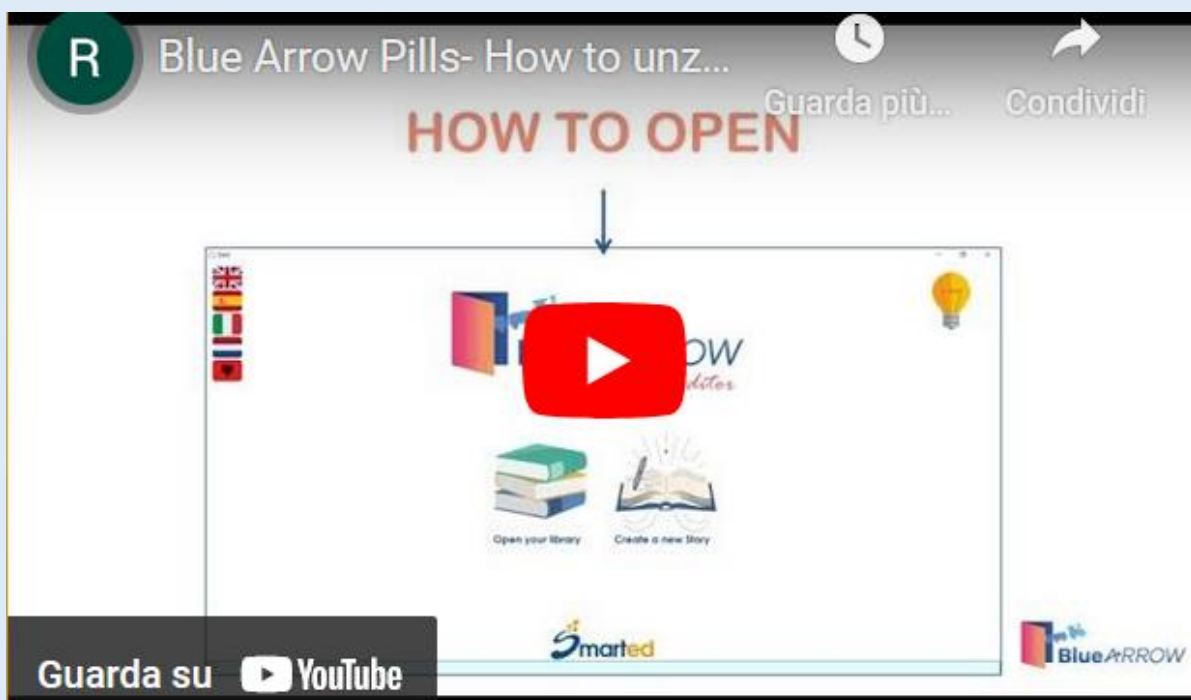
Multisensory stories implemented with Blue Arrow authoring tool represents a resource that can be easily shared. The users will find all their multisensory stories in a specific folder in their Windows device; the folder contains the app and the multimedia material, that can be and will be easily shared as OERs.

## Blue Arrow Pills & Video Tutorials

### [How to install Stelt](#)



### [Download the Authoring Tool \(Blue Arrow Editor\)](#)



## [How to set a story](#)



## [How to edit the scenes of your story](#)





[How to see your story on Windows device](#)



## [How to tag an object and write its code](#)



## [How to open your Story on Android devices](#)

