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## FINAL REPORT 2<sup>nd</sup> Questionnaire

### **Place and dates of submission of the questionnaire**

Italy: Istituto Comprensivo *Karol Woytjla*, Rome – November 13th 2009

Belgium: Vrije Basisschool Ursulinen, Mechelen – November 10th 2009

Poland: between November 9th - 13th 2009

- Primary school number 111, Łódź
- Primary school im. Kosciuszko's Infantry Division, Łódź

Ireland: Willow Park Schools (Boys National Schools), Dublin – November 10th 2009

Bulgaria: "Sveti Ivan Rilski" Sofia – November 19th 2009

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## **NUMBER OF PARTICIPANTS**

**In total 395 children composed the Focus Group**

EXPLORA (Italy):	46 (21 boys, 25 girls)
IMAGINOSITY (Ireland):	71 (71 boys, no girls)
PARKMINIATUR (Poland):	66 (30 boys, 36 girls)
TECHNOPOLIS (Belgium):	99 (44 boys, 55 girls)
ARTLAND (Bulgaria):	113 (48 boys, 65 girls)
<b>TOTAL:</b>	<b>395 (214 boys, 181 girls)</b>

## **AVERAGE AGE of FOCUS GROUP**

**The average age of the Focus Group is 8,28**

EXPLORA (Italy): 8,42

IMAGINOSITY (Ireland): 7,5

PARKMINIATUR (Poland): 8

TECHNOPOLIS (Belgium): 9

ART LAND (Bulgaria): 8,5



## **SUBMISSION METHODOLOGY**

The 2<sup>nd</sup> Questionnaire was submitted without general introduction to the two main topics (animations and water) but before they started children were reminded about the first Focus Group on the topic of water in which they took part.

Children have received a form (FORM B) without questions, provided with blank spaces for answers and numbers according to the questions which the staff involved read out. B forms are anonymous: children were required to write only their ages and gender.

Italian children read the questions on the PowerPoint presentation and questions were asked slide by slide by the staff supervising the questionnaire. The other museums chose not to use a PowerPoint presentation: their staff read out the questions one by one showing the images to the children.

Teachers and recreation staff made sure that children answered seriously, not mockingly. For this reason Explora suggested that children sit around coffee tables, and that each supervisor took care of a group of 6 children. The presence of the supervisor did not influence children's answers.

## **MAIN ISSUES BEFORE THE FOCUS GROUP**

### ITALY

Problem in communication with the school: every year classes require a document signed by the headmaster that allows them to go out of the school. There have been problems and delays to receive the document.

### IRELAND

It was difficult to find a date that would suit the schools as the 9th – 13th is Science week in Ireland. It was noticed that some of the European schools have different holidays and the focus group time given by Explora tended to be during Irish school breaks.

### POLAND

None.

### BELGIUM

None.

### BULGARIA

None.

## MAIN ISSUES DURING THE FOCUS GROUP

After the submission of the 1<sup>st</sup> Questionnaire, the content partner WWF provided Explora with the interesting document “The sustainable use of natural resources: Water” and Explora decided to circulate this Information material developed by WWF (PPT presentation with pictures and text) among the teachers involved in the project. The presentation was sent to Museums for them to translate it and forward to the teachers. Museums were free to decide to carry out or not this translation task: Explora, Imaginosity, Artland and Technopolis translated the document and gave it to the teachers who accepted it with enthusiasm.

One of the main issues is the number of participants: due to the flu epidemic, less children attended the focus group (- 18,3% in general), in particular in Italy (- 57,4%), in Poland (- 25%) and in Ireland (- 22,8%).

### ITALY

Teachers thought that reading the 3 stories plus the general one in a row to children would have been too tiring for them and that as a result they would have been less concentrated. It was suggested not to read the four stories, but it was necessary to collect children’s ideas and opinions just on each single episode and not only on the general story. Of course for the 3<sup>rd</sup> Questionnaire it will be easier for the children to follow each story since episodes will be shown and not read out.

### IRELAND

Teachers and recreational staff in Ireland pointed out that some notions used in the questions were unknown from the children and needed to be explained, such as *Pesticide* and *Hydropower Plant*. After explanation, children could answer the questions without any problem.

For the interpretation of results in Ireland, it is important to note that Imaginosity worked with an all boy school, from a middle class background. For some of the children the questions were too simple and did not really engage them to explore any further. At the end of the questionnaire, it could have been interesting to have additional questions to get children’s opinion on what type of adventure they would like to take with the characters. It would have been a good opportunity to learn more about what interests the children about the series, and give them the occasion to give more creative inputs. Following this observation, it could be considered at the time of the 3<sup>rd</sup> Questionnaire to include open questions to collect children’s opinions.

Regarding Victoria’s image shown to the children in the B form, children thought the picture represented three different characters, as opposed to one, turning around. It was useful to animate this before they answered their question (still, some children approached the question as looking at 3 different characters).

### POLAND

None.



## BELGIUM

It was noted that multiple choice questions are easier to answer for children than open questions to which only one answer is expected to be given. However, even when children gave more than one answer to the open questions, only the first one was noted by the evaluator since the first answer is considered as the immediate and most emotional idea children have.

## BULGARIA

None.



## **MAIN ISSUES AFTER THE FOCUS GROUP**

Collection and analysis of results have been rather timely and efficient.

Differently from the 1<sup>st</sup> Questionnaire and according to the suggestions given by the subcontractors after the 1<sup>st</sup> Questionnaire, this time the staff has not been requested to use a general system to give a protocol number to all B forms: in fact each museum was responsible for the collecting of the answers so it could manage the questionnaires using its own system to give them a number. Every museum received a C form (evaluation file in Excel) to fill in to report answers to Explora.



## QUANTITATIVE EVALUATION OF ANSWERS

The entire documentation including Form A for teachers, Form B for children, Form C for evaluation and Form D with the local focus group report are available upon request.

The table below presents the results of the multiple choice questions. Columns on the right show the percentage of answers for each country as well as the general results.

Questions	Answers per countries	BELGIUM	BULGARIA	ITALY	IRELAND	POLAND	GENERAL
		Boys 44%	Boys 42,5%	Boys 46,6%	Boys 100%	Boys 45,5%	Boys 54,1%
		Girls 55%	Girls 57,5%	Girls 53,4%		Girls 54,5%	Girls 45,9%
1) Do You like Ben?	Yes	87%	56%	41%	76%	61%	66%
	No	13%	44%	52%	24%	39%	33%
	No answer	0%	0%	7%	0%	0%	1%
2) Do You like Jackie?	Yes	85%	66%	63%	23%	76%	64%
	No	15%	34%	37%	77%	24%	36%
3) Do You like Lucy?	Yes	62%	67%	52%	10%	50%	51%
	No	38%	33%	48%	90%	50%	49%
4) Do You like Boo?	Yes	100%	84%	87%	97%	85%	91%
	No	0%	16%	13%	3%	15%	9%

5) Who is your favourite character?	Ben	11%	22%	13%	7%	20%	15%
	Jackie	9%	2%	9%	0%	23%	7%
	Lucy	11%	26%	2%	0%	5%	11%
	Boo	69%	50%	76%	93%	52%	67%
7) Would you like to join these four characters in their adventures to learn about water?	Yes	93%	94%	98%	89%	86%	92%
	No	7%	6%	2%	11%	14%	8%
9) In your opinion, why did the animals leave Victoria's wetland?	Victoria has been mean to them and they decide to leave her alone	1%	4%	4%	3%	5%	3%
	The water in Victoria's wetland was polluted.	98%	96%	96%	97%	95%	97%
	No answer	1%	0%	0%	0%	5%	0%
10) Why do the animals come back to Victoria's wetland?	The factory builds a filter to stop polluting the water.	93%	86%	87%	96%	92%	92%
	Victoria organizes a party.	6%	11%	13%	4%	8%	8%
	No answer	1%	0%	0%	0%	0%	0%
11) Do you think that we can use water the way we want and without any limitations?	Yes	3%	46%	15%	8%	14%	19%
	No	96%	54%	85%	92%	86%	81%
	No answer	1%	0%	0%	0%	0%	0%

12) What does the story tell you about the use of water?	We can use water the way we want.	1%	4%	4%	1%	9%	4%
	We can not waste water and we must use it responsibly.	98%	96%	96%	99%	91%	96%
	No answer	1%	0%	0%	0%	0%	0%
13) Why, according to you, is the place where the kids arrive so stinky and horrible?	There is no more water left in the river because of companies and farms using too much water and pesticides.	91%	85%	85%	90%	82%	87%
	Some people had a big party and they threw all their waste in the river.	8%	15%	15%	10%	18%	13%
	No answer	1%	0%	0%	0%	0%	0%
14) Would you like to know more about Victoria's wetland, and Klexus' planet, and go on a boat trip along a river with Boo and his friends?	Yes	98%	93%	91%	89%	76%	91%
	No	1%	7%	9%	11%	24%	9%
	No answer	1%	0%	0%	0%	0%	0%

The table below presents the results according to the *Evaluation Grid*. Results confirm that the objectives have been achieved as all questions received a score equal or higher than the percentage quantifying the success. Note that only Question 3 about the character “Lucy” did not reach the required 60% of positive answers which indicates that the objective is achieved.

<b>WHAT WE NEED TO KNOW</b>	<b>HOW?</b>	<b>FINAL QUESTIONS</b>	<b>QUANTIFICATION of SUCCESS</b>	<b>RESULT</b>
Are the messages clear?	At least 3 questions	Questions number 9), 10), 11), 12), 13)	60% of positive answers	Question 9): 97% of positive answers.  Question 10): 92% of positive answers.  Question 11): 81% of positive answers.  Question 12): 96% of positive answers.  Question 13): 87% of positive answers.
Are the messages conveyed in a fun and understandable way?	At least 2 questions	Questions number 9), 10), 11), 12), 13)	60% of positive answers	See row above.

Are the storylines engaging?	At least 1 question	Questions number 7), 14)	60% of positive answers	<p>Question 7): 92% of positive answers.</p> <p>Question 14): 91% of positive answers.</p>
Do children like the characters, including the secondary characters?	4 questions	Questions number 1), 2), 3), 4)	60% of positive answers	<p>Question 1): 66% of positive answers.</p> <p>Question 2): 64% of positive answers.</p> <p><i>Question 3): 51% of positive answers.</i></p> <p>Question 4): 91% of positive answers.</p>
Other important quantitative and qualitative information can be extracted by questions number 5), 6) and 8).				

## OPEN QUESTIONS

To question n. 6 “Now look at this other character: what do you think of her?” referring to Victoria, children gave the following answers:

<b>Answers</b>	<b>% of total 395</b>
Children who find her nice, cute, pretty, lovely	40,25
Children who find her fat, plump.	7,59
Children who find her sweet, tender.	7,08
Children who find her funny.	4,55
Children who find her strange, weird.	4,30
Children noticed in particular the fact that she is a vole, a mouse.	3,79
No answer, no sense in the answers.	3,79
Children who just like her.	3,29
Children noticed in particular the fact that she has a scarf, a green scarf, she has nice clothes.	2,78
Children who find her cool.	2,78
Children who find her short.	2,27
Children noticed in particular the fact that she has a funny smile.	2,02
Children who find her face/aspect nice.	1,51
Children who find her ok.	1,51
Children who find her friendly.	1,26
Children who find her not nice.	1,26
Children who find her simply smiley.	1,01
Children who find her kind and good with the others.	1,01

Children who find her ugly.	0,75
Children who find her smart.	0,75
Children noticed in particular the beautiful eyes.	0,50
Children noticed in particular the funny nose.	0,50
Children who find her cold.	0,50
Children noticed in particular that she is a female.	0,50
Children who find her stupid.	0,50
Children who find her crazy.	0,50
Children who do not like her.	0,50

Children noticed in particular the blue eyes.	0,25
Children noticed in particular the eyelash.	0,25
Children noticed in particular the pink nose.	0,25
Children noticed in particular the rotund nose.	0,25
Children noticed in particular her funny teeth.	0,25
Children noticed in particular the big teeth.	0,25
Children who find her yellow.	0,25
Children who find her old/older.	0,25
Children who find her awesome.	0,25
Children who want her as a pet.	0,25
Children who find her happy.	0,25

In question n. 8, after asking the children if they would like to join the four characters to learn new things about water, children were asked to explain why they answered *yes* or *no* to the previous question. The table below reports the answers of those who have ticked *yes*:

<b>Answers</b>	<b>% of total 363 <i>yes</i></b>
Children who want to discover the topic water, how water works, and want to know new interesting things.	21,48
Children who find the story interesting.	16,25
Children who find the story funny.	12,67
Children who like to be in new adventures and like travelling for new adventures.	9,36



Children who find the story useful to learn new things and for the mankind (3 children out of 30).	8,26
Children who find the 4 characters nice.	5,78
Children who find the 4 characters and stories can make a good cartoon.	5,23
Children who find the story and the characters cool.	3,58
Children who like the story.	2,75
Children who like Boo and for this they want to follow the story.	2,75
No answer, no sense in the answers.	2,20
Children who like water (in particular swimming)	1,37
Children who want to meet new people/friends.	1,37
Children who think that watching a cartoon is nice.	1,10
Children who find the 4 characters cute, pretty.	1,10
Children who find the 4 characters smart.	1,10
Children who love cartoons.	0,82
Children who like animals (dogs).	0,55
Children who find the 4 characters funny.	0,55
Children who like the fact that Boo and the carillon come to life.	0,27
Children who like Ben's hair.	0,27
Children who consider the story useful for children who don't respect water.	0,27
Children who already watched a movie about water.	0,27
Children who think that water makes electricity and for this they want to follow the story.	0,27
Children who find the 4 characters good friends.	0,27

Children who have associated the topic of the animation with the fact that their Zodiac sign is Aquarius.	0,27
Children who want to be one of them.	0,27

The table below reports the answers of those who have ticked *no*:

<b>Answers</b>	<b>% of total 32 <i>No</i></b>
No answer, no sense in the answers.	37,2
Children who do not want to learn.	15,62
Children who find the story boring.	12,5
Children who don't find the story funny.	9,37
Children who find the story uninteresting.	
Children who already know enough about water.	6,25
Children who do not want to follow the story because water can be polluted.	6,25
Children who hate water.	3,12

## FINAL PEDAGOGIC EVALUATION OF ANSWERS

### Objectives of the 2<sup>nd</sup> Questionnaire

The 2<sup>nd</sup> Questionnaire has for main objective to test and evaluate two aspects of the cartoon animation:

- Visual impact of the characters

The first part of the Questionnaire (question 1 to 6) aimed to test the four main characters and one of the secondary characters, “Victoria the vole”, in order to know if children like them or not. For Victoria in particular, children had to answer to an open question in view to collect their impressions with their own words and give them the opportunity to freely express themselves.

- Interest and Content of the storylines

The second part (question 7 to 14) of the Questionnaire aimed to test if the storylines convey the messages in:

- 1) a clear and understandable way
- 2) a fun and engaging way

To each of the three messages developed by the scientific partner WWF corresponds one of the three episodes of the cartoon animation. A summary of the whole story and of the three episodes were read out to children and questions were then asked to them in order to test the two aspects mentioned above. Question 7 “*Would you like to join these four characters in their adventure to learn about water*” aimed to evaluate if the overall story is engaging for children. The following question 8 “*Why*” was created to understand from children what attract them in the story. The last question, n° 14 “*Finally, would you like to know more about Victoria’s wetland and Klexus planet, and go on a boat trip along a river with Boo and his friends?*” was asked to children after all episodes had been shortly presented, also in order to test the engaging aspect of the stories.

Questions 9 to 13 correspond to one of the three episodes, each of them linked to one of the three key messages “Water Pollution” (Questions 9 & 10), “Water Conservation” (Questions 11 & 12), and “Water and the world – we depend on rivers flowing and wetlands wet” (Question 13). The aim of these questions was to evaluate if the stories convey the messages in a clear and understandable way for children. For these five questions, it was decided to ask only multiple choice questions, with only two possible answers, in order to verify if children really understand the message without confusing them.

## **Children's perception of characters**

### *Use of images and link with 1<sup>st</sup> Questionnaire*

Images are the best tool to communicate with 7-8 years old children in a direct and clear way. Moreover the simple structure of this questionnaire allowed the children to see the interrelation between this and the previous questionnaire and therefore to follow the development of the project: they connected the images of the characters and the content of the stories with the topics and the questions from the 1<sup>st</sup> Questionnaire.

### *Striking result: all children like Boo*

Result to question 4 about the character Boo is clearly satisfying as 91% of the children answered that they like him. This character has a big success among the children and this fact is confirmed by the result of Question n. 5 where Boo appears as the character that children liked the most (67%). The toy dog is a part of the children's imaginative world: he is a friend, a partner in their toy adventures, and thanks to his transforming power he is a figure that stimulates children's imagination.

### *Children also like all main characters*

First questions aimed to evaluate the first impression of the children on each character: children like all of them, except for Lucy even if the result is not too unsatisfying (49%). This result could find an explanation in the fact that Lucy is the youngest in the group.

Another point that can be noted about the group of characters comes from remarks made by the Irish children: Children consider that all characters are too feminine, even Ben who is the only masculine character. The four characters correspond to distinct stereotypes: the hippy/fashionable Jackie; the nerdy but perhaps clever Lucy, the straight regular Ben and the inanimate character for those that don't want to associate with gender specific. However, the children missed another role model to identify with, perhaps the off-beat, nerdy guy who does not look like a stereotypical kid. It was therefore suggested by Imaginosity to introduce another boy character to the current four since as in all cartoons children need to identify with one or several of the characters to be engaged on an emotional level. An important note about the Irish concern must be added to this opinion: the Irish class is composed of boys only and it can be supposed that they have exercised a reciprocal influence on each other, as this issue wasn't raised in other countries.

### *Children like Victoria the vole as secondary character*

To the open question concerning Victoria, most of the children answered with positive adjectives to describe what they think of this character. Similar to Boo, most of the children like Victoria because they consider her as a companionable pet: she is cute, pretty, lovely, plump, tender and nice. Children's first impression on her gives them positive expectations for her future actions in the animation. Children empathize with anthropomorphic animals because in cartoons and stories the animals live like them: the animals speak, smile and cry, love and suffer, etc. For this reason 'the animal'— so different from us in the real life and at the same time so similar to us in the imaginative world - is a tool that the children use to work out ideas and gradually understand them.

In Ireland however, children complained that Victoria was again a feminine character. This is linked to the point mentioned above. However, Victoria is only one of the secondary characters the others like Klexus' friends or the factory owner are more masculine, therefore the balance will be restored.

## **Relevance and effectiveness of the storylines**

### *Children's perception of water pollution and water as a natural source of life*

The clearness of the storylines on water pollution was tested in Question 9 and 10. The first episode with the character of Victoria as protagonist also deals with the perception of water as a natural source of life. The story of Victoria and her wetland is effective and well focused on the topic as shown by the results: 96% of right answers at Question 9 and 87% of right answers at Question 10. This means that children were able to make the interrelation between nature, water and the effects of human activities on this resource. These results show that the storylines rightly point out to the children the topic of water pollution, and by extension, the topic of water as a natural source of life, as children clearly understood that when the water is polluted, the environment is no longer welcoming for all living creatures.

This is an interesting point to note, in comparison with the children's answers to the 1<sup>st</sup> Questionnaire question on water pollution. At that time, 45% of the children had answered that when the water is polluted "They cannot drink anymore", showing that for them, the damages of pollution on human beings are the worst. Only a few children had considered water pollution as a problem which is not only related to their lives but can impact on other living creatures. The episode of Victoria's wetland will clearly illustrate that all living creatures are dependant on water quality and supply.

### *Children's perception of water conservation*

As for the first episode, the objective of the second episode on water conservation is considered as achieved, as results of the 2 questions (87% of correct answers to Question 10 and 85% of correct answers to Question 11) show that children have rightly understood the messages: water is a limited natural resource and it is important to use it in a responsible way.

Interestingly, these results differ from the findings of the 1<sup>st</sup> Questionnaire on the same topic when children were not conscious of their use of water in their daily life and the majority of them thought they use water in a proper way and as much as they really need. The results of the 2<sup>nd</sup> Questionnaire show that the story of Klexus planet has the potential to have a good influence on children.

In general children are superficial on the topic because they are not always educated and encouraged to think about the consequences of their own actions also on the other living creatures and on the whole ecosystem. In fact children naturally relate every fact only with their own and personal experience. In these cases there is a need of an emotional and cognitive decentralization. Cartoon animation is one tool to carry out this decentralization process and make children feel involved in a global system.

Compared with the first Focus Group, the story of the character Klexus has brought about a little but important change of mind and we think that the final view of the episode during the third Focus Group will improve this output.

### *Children's perception of water and the world*

The last episode describes a horrible and unwelcoming place damaged by the entire society. People responsible for this disaster are companies, farmers, and every single man. The 85% of right answers demonstrate that the message of the individual and collective responsibility is clear to children. Children understood that each of us is responsible for quality and supply of water. This result has confirmed a knowledge that children already had at the time of the first Focus Group.

### **Children’s perception of the entertaining potential of the stories**

The results from Questions 7), 8) and 14) show that children find the story engaging and that they would like to join these four characters in all their adventures, to learn new things about water because they want to know more and are curious to know what happen next. The fantasy, the amusement and the adventure have proved to be interesting elements that the children expect from an animation and at the same time the children show that they are really interested in the topic and the environmental issues linked to water consumption in all its aspects.

### **Conclusion**

The results of the 2<sup>nd</sup> Questionnaire and their analysis demonstrate that the objectives of the second phase of the animation process have been achieved, both in term of attractiveness of the characters and stories, and in term of managing to convey clear messages that will be understood by young viewers.

By following a group of characters they like in stories and adventures they enjoy, children will be invited to reflect on the topic “water” and what it means for them in their daily lives as young citizens and consumers. These reflections should give them a new awareness on the topic. The messages of the stories should also motivate them to change their daily uses of water.

It is worth noticing that after the stories had been read out, children expressed their will to deepen the content of the stories and know more on the issues developed. This informal learning is differs from the traditional teaching approaches and ways of communication at school. Teaching by amusement is key to achieve the aim of the project: it attracts and keeps up children’s attention involving their interpersonal and intrapersonal mind. These kinds of intelligences are different from the logical and mathematical ones because they are ‘practical’ intelligences, meaning they are closer to the children’s daily experience and life. Through their concrete aspect they can really prompt children to positively change their behaviour.