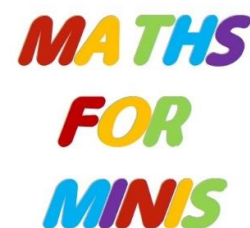




Fundación Docete Omnes  
[Calle Padre Villoslada, 18140,  
Zubia \(Andalusia\)](http://www.doceteomnes.com/)  
<http://www.doceteomnes.com/>



## Report on the implementation of the exhibition

### Minimathematikum in Granada, Spain

OCTOBER 14<sup>th</sup> – 25<sup>th</sup> 2019

#### 1. The exhibition “MiniMathematikum” in Tolmezzo, Italy, in the context of the project “Maths for Minis”

In accordance with the project aims and planning, the third journey of the travelling exhibition “MiniMathematikum” was to Spain. The second destination was Granada, situated in the south east of Spain, where it was exhibited in the period 14-25 October 2019, in line with the project timeline. This project activity was conducted by the project partner Fundación Docete Omnes – La Zubia, Granada.

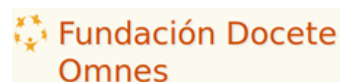
In general, this activity was implemented with success, as planned.

#### 2. Implementation

##### 2.1 Preparatory phase

The preparations for the exhibition began in early January 2019, with internal meeting of a small group of F.D.O staff, for the development of an action plan of activities, time arrangements, resources plan etc. for a successful conduction of the responsibilities related to the preparation of the exhibition.

According to these arrangements, in the period January – February 2019, comprehensive preparations were made in order to find a suitable exhibition space and to identify schools,



kindergartens and other potential educational centres for the children aged 4-8 years as target group of Minimathematikum.

*Identification of suitable space.* The most difficult part was to identify the space, we contacted the many schools to see if they would allow us to use their facilities to carry out the exhibition. We also contemplated using the Foundation's own space but decided against that due to the location of schools and the difficulty of getting to the location for many of schools that we would be asking to attend. We got in touch with Ave Maria. This is a school located in the heart of Granada. They were open towards allowing us to use their hall for the exhibition. They also have a primary school associated with their organisation and were interested in their students participating in the exhibition. We got in contact with schools before the summer break and directly after as well.

*Preparation of promotional material.* An integral segment of the preparation was the development of promotional and informational materials for the project in general with special emphasis of the exhibition in Granada. This included translation and printing of the leaflet, translation of the newsletter, drafting of a cover letter for communication etc. This was sent to every school in Granada before the summer break with follow up calls after the break.

*Promotion of the exhibition in educational facilities.* For this purpose, the project and the exhibition were promoted in all the local schools and kindergartens via e-mail and letters with brochures. We took the experience of our Italian and Macedonian partners into account and we invited many schools to join in by organizing group visits for their pupils in the age range 4-8 years.

*Development of an exhibition schedule.* In order to organize and conduct the exhibition in the best possible manner, with maximum efficiency and effectiveness, it was decided to make a schedule of visits. In the communication with the educational facilities, it was decided that the exhibition will be visited by the classes, led and accompanied by their teachers, defining maximum numbers of participants and visit shifts as following:

- Max 30 children per visit
- Two shifts every morning from 09.00 to 11.30 and from 11.45 to 13.15 Monday to Friday.

*Logistical/technical coordination and preparation.* This phase included communication with the project coordinator and partners from Germany, for the successful transport from Germany to Italy and setting up of the exhibits. The previous experience of both the Macedonian and Italian partners were very useful to this purpose.

*Conduction of a Learning/Training/Teaching Activity.* This meeting was held the week previous to the exhibition and was a very important part of the preparation of the exhibition, as it offered introduction into the technical aspect of the exhibition as such, but moreover it aimed at equipping the team with the information, knowledge and know-how on the idea, concept and background of “Minimathematikum” in general and with instructions and recommendations on approaching and guiding the young visitors through each play station. The gained knowledge was very valuable and used in practice throughout the everyday work with the children. We also recorded some videos of explanations to share with the school involved in the project as alternation school/work.

*Involving teachers in training in the exhibit.* In many of the schools we had contacted they had teachers who were doing their internships and so it was decided to send them information before the groups would come to the exhibition. This had the aim of give them the opportunity, for didactical reasons, to directly observe the behaviour of the little ones in the training / play activities of the exhibits. They were instructed not to explain any of the activities to the young students until they had explored each activity themselves.

## 2.2 Conduction

The exhibition was held in the period 14 – 25 October 2019. Thirteen elementary schools (classes 1 to 3) participated. In addition, children with parents, a community for disabled, a secondary school were welcomed.

A total of 576 children in the age 4-8 years visited MiniMathematikum.

All the schools, that took part at the exhibition, showed great interest and motivation. Especially a school asked, after first visit, to be able to come again.

As recommended a visit lasted 90 minutes. The game stations were all in one hall, so children stayed about 80 minutes in the exhibition. The last 10 minutes were used to ask the participants for feedback and the children thoughts and feelings.

## 3. Evaluation of results

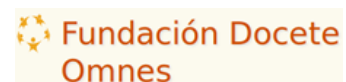
The analysis of the project documentation showed following figures:

- Teaching staff: about 70+
- Children in total: 576 (305 girls and 271 boys). Out of them, 51 children from migrant families, 24 Roma, 46 with disability.

Date	Female Children	Male Children	Children from migrant families	Roma Children	Disabled	Total
14.10	20	11	/	/	/	31
14.10	9	7	/	/	7 (m); 9 (f)	16
15.10	11	13	/	/	/	24
15.10	12	13	/	/	/	25
16.10	12	9	/	/	1 (f)	21
16.10	13	13	/	/	/	26
16.10	7	5	/	/	7 (m); 5 (f)	13
17.10	13	12	/	/	/	25
17.10	12	10	/	/	/	22
17.10	14	16	2 (m)	1 (m); 1 (f)	1 (m); 1 (f)	30
18.10	16	9	2 (m); 3 (f)	2 (m); 5 (f)	/	25
18.10	15	13	6 (m); 5 (f)	4 (m); 5 (f)	1 (m)	28
21.10	11	13	1 (m); 1 (f)	/	/	24
21.10	18	13	/	/	4 (m); 1 (f)	31
21.10	9	11	/	1 (m); 2 (f)	3 (m)	20
22.10	14	9	/	/	/	23
22.10	15	11	/	/	/	26
23.10	9	14	2 (m); 2 (f)	/	2 (m); 1 (f)	23
23.10	15	10	1 (m); 1 (f)	/	/	25
23.10	7	16	4 (m)	/	/	23
24.10	13	12	1 (m); 4 (f)	2 (m); 1 (f)	/	25
24.10	16	8	4 (m); 8 (f)	/	2 (m); 1 (f)	24
25.10	11	11	2 (m); 2 (f)	/	/	22
25.10	13	12	/	/	/	25
	<b>305</b>	<b>271</b>	<b>51</b>	<b>24</b>	<b>46</b>	<b>576</b>

#### 4. Dissemination

F.D.O shared information on our website, as well as on the Docete Omnes FB profile, through In addition, Lifelong Learning Center created a separate page Minimatematikum Macedonia, where info and pictures from the exhibitions were posted on daily basis. There was also a press release with ahoragranada.com that has been got upwards of 3000+ views.



## 5. Experiences/ Findings/ Recommendations

F.D.O's role in this project in general, and the opportunity to organize and host the exhibition Minimatematikum, was a great experience was a great opportunity for our organisation to get to know schools and centres interested in collaborating in innovative projects. For our team it was a valuable new experience and an extraordinary learning opportunity, especially because we normally deal with adults with mental disabilities, but we found out that dealing with children is extremely interesting.

### Logistics:

The exhibition was held in a very central location in Granada and it made the logistics a little difficult, however, it was all managed well and there were no major incidents to report in both the assembly and disassembly of the exhibition.

In this regard, all instructions that came from the side of the German partners were crucial and very useful for successful technical management at the beginning and the end of the exhibition. For safety reasons we used the exhibits to cover some dangerous points so that the children could not see them and did not stumble.

### Observations during group visits:

From the two-weeks hosting and guidance of 25 groups of 576 children, following experiences were made:

- The children were happy and enthusiastic. When asked if they would like to participate again in future exhibitions the answer was always overwhelmingly positive.
- Favourite games: big soap bubble, mirror hut, ball race track, gears, bricks building.
- Children avoid special play stations: stations that need bigger effort or attention to focus in order to solve the task (for example the pyramid construction) and draw looking at the mirror.
- Children asked help to build the bridge.
- It was not intuitive the play at the table where they must recognize hidden objects and the children were so curious that they could not help themselves from looking underneath to see what they were touching.
- The children don't follow the pictograms of the game stations. They adapted to nearly all the games using their intuition.
- Some children found certain stations too easy (ducks are too simple for them).

- Used less of the more challenging stations at the start but went to them later.
- At the end of the 90 minutes many participants wanted to continue.
- Useful to give introduction at the beginning and communicate some directions (for example use big soap bubble one by one).
- From the discussions with the teachers it is clear that, in the majority of cases, this kind of approach in bringing mathematical concepts is present in many primary schools in Granada and the children who had used this method before were very good at solving the more difficult game stations.
- Some schools could not participate for logistic and transport reasons.

## 6. Conclusions and recommendations:

As far as the logistics and organization of the exhibition are concerned, the next working groups are advised to start disseminating the initiative well in advance as it is difficult for schools to ask for permission from the school or parents, organize the bus and include the activity formally from an educational point of view. We made contact before Summer and straight after Summer and only through hard work and persistence did we managed to get the number of participants that we did.

Attention to the safety of the spaces made available to prevent accidents and injuries, for example we have covered all protruding corners, closed any pipes or power outlets.

Keep the net within reach to foam the soap bubbles to allow the use of the game station in the most correct way.

With the help of the previous experience and the report developed by the Macedonian partners we developed a checklist which we recommend to follow not to forget advice and key indication.

It is necessary to explain to the children the exposition and introduce the games in an area far from the games themselves, at the entrance or in the lobby because when they see the games, they start focusing on the games you need to give them some basic rules.

Make a discussion circle at the end of the meeting to ask the children for an evaluation of the experience, for example, ask kindergarten children what were the most interesting games for them and in addition, for children from the elementary schools, what was teaching behind or if they learned anything from the plays.



The children, especially the smaller ones, did not get bored after 90 min. indeed they asked if there were other games available or if they could return for a second meeting.

The activity to be done at the table of the recognition of hidden objects was not very intuitive, so it is necessary to give at least the indication to the teacher so they can more easily guide the children.

Ask help from teachers to better deal with water games especially the big bubble. The children alone don't understand that, for security reasons and for the fact that the floor will be slippery after the first bubble, they have to stay in line and follow some rules.

## 7. Photo Gallery

