



PILOTS

**Professionalisation for learning in technology and science
141872-LLP-1-2008-1-BE-GRUNDTVIG-GMP**

D5.1: Training course programmes

Workpackage 5: Training Courses

Workpackage leader: Flanders

Technology International

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www.thepilots.eu

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1 Executive Summary

This deliverable describes the first two training courses which were held in the framework of the Pilots project. The first was hosted by Technopolis in Mechelen, Belgium, on the 1st-4th April 2009; and the second was hosted by Museo della Scienza e della Tecnologia Leonardo da Vinci, Milan, Italy on the 2nd and 3rd June 2009. Included are a list of participants, programme and detailed analysis, session by session, by the workshop leaders.

The programmes for the training courses were compiled by the consortium in the context of Workpackage 5 led by Technopolis. The materials produced for these training courses are reported in D4.2 Pedagogical materials.

This deliverable includes the programme for these events, several photos, and a detailed commentary from the project partner who acted as workshop leader for each activity. This commentary is intended to detail what took place, and the workshop leader's thoughts and reflections on the activity. These reflections are intended as a supplement to the evaluation report on each workshop.

2 Training Mechelen: overview

The training encompassed a four day course at Technopolis®, Mechelen. Trainees from all over Europe subscribed for the course. In total, nearly 50 people participated: 17 project partners involved in the implementation of the course, 20 explainers from external institutions, and 10 explainers from project partners. The following participants were present:

Ecsite	Belgium	<i>Michael Creek</i>
Ecsite	Belgium	<i>Catherine Franche</i>
Ecsite	Belgium	<i>Aliki Giannakopoulou</i>
Ecsite	Belgium	<i>Jennifer Palumbo</i>
Technopolis	Belgium	<i>Walter Gincels</i>
Technopolis	Belgium	<i>Patrik Claes</i>
Cité des Sciences	France	<i>Anne-Lise Mathieu</i>
Cité des Sciences	France	<i>Laure Cassus</i>
House of Experiments	Slovenia	<i>Miha Kos</i>
House of Experiments	Slovenia	<i>Luka Vidic</i>
Sissa Medialab	Italy	<i>Paola Rodari</i>
Sissa Medialab	Italy	<i>Enrico Balli</i>
Museo della Scienza e della Tecnologia Leonardo da Vinci	Italy	<i>Camilla Rossi-Linneman</i>
Museo della Scienza e della Tecnologia Leonardo da Vinci	Italy	<i>Sara Calcagnini</i>
Pavilion of Knowledge - Ciência Viva	Portugal	<i>Sofia Lucas</i>
Pavilion of Knowledge - Ciência Viva	Portugal	<i>Rosario Pereira</i>
TRACES (project evaluator)	France	<i>Matteo Merzagora</i>
Technopolis	Belgium	<i>Hans Verstraeten</i>
Technopolis	Belgium	<i>Inge Hoornaert</i>
Technopolis	Belgium	<i>Lise Van Belle</i>
Technopolis	Belgium	<i>David Bergmans</i>
Cité des Sciences	France	<i>Laurence Denis</i>
Cité des Sciences	France	<i>Stéphanie Rosalie</i>
House of Experiments	Slovenia	<i>Sabina Zaloznik</i>
Museo della Scienza e della Tecnologia Leonardo da Vinci	Italy	<i>Massimo Abbamonte</i>
Pavilion of Knowledge - Ciência Viva	Portugal	<i>José Alvez</i>
Pavilion of Knowledge - Ciência Viva	Portugal	<i>Margarida Isabel Conde Borralho</i>
Experyment	Poland	<i>Maria Sachajko</i>

AHHAA	Estonia	<i>Irina Orekhova</i>
Techmania	Czech	
Experimentarium	Republic	<i>David Lobotka</i>
Museu Agbar de les Aigües	Denmark	<i>Karsten Madsen</i>
Museu Agbar de les Aigües	Spain	<i>Esther Lopez</i>
Eugenides Foundation	Spain	<i>Marta Soler</i>
Naturalis	Greece	<i>Lida Arnellou</i>
Industrion	Netherlands	<i>Japke van Dalen</i>
Industrion	Netherlands	<i>Jill Vrancken</i>
Museon	Netherlands	<i>Irene Wartene</i>
Museon	Netherlands	<i>Ben van Tilborg</i>
Nemo	Netherlands	<i>Hienke Rijnbeek</i>
Nemo	Netherlands	<i>Maurice Alberts</i>
Phaenomenta	Netherlands	<i>Annie Gerretsen</i>
Museo Storia Naturale Milan	Germany	<i>Martin Engel</i>
Utrecht	Italy	<i>Stefano Papi</i>
Centre for Life	Netherlands	<i>Hester Ketel</i>
Hidrodoe	UK	<i>Farrah Nazir</i>
Antwerp Zoo	Belgium	<i>Natacha Buts</i>
Universeum	Belgium	<i>Hubert Luypaers</i>
	Sweden	<i>Emma-Kara Nilsson</i>

Mechelen Programme					
1st April					
convenor	hour	title	content	speaker	
Ecsite	09:00-09:05	Consortium meeting	Closed meeting of the project partners		
Ecsite	09:05-10:45				
	10:45-11:15	Coffee Break			
Ecsite	11:15-12:30	Consortium meeting	Closed meeting of the project partners		
Ecsite	12:30-13:00				
	13:00-14:00	Lunch			
	14:00-15:00	Plenary session	welcoming & introduction + assessment of expectations for this training	Ecsite	
	15:00-15:45	Ice-breaking	Getting to know each other	Technopolis	
	15:45-16:15	Coffee Break			
	16:15-18:00	Explainer's self-portrait	-discussion game about the job of explainer + data from abroad	Sissa Medialab/La cité	
	18:00-21:00	Walking diner (free for all participants)			

2nd April				
convenor	hour	title	content	speaker/ moderator
<i>Ecsite</i>	9:00-10:00	Consortium meeting	Closed meeting of the project partners	
	10:00-11:00	Results of the survey	Presentation of the first survey results to the participants+discussion	Sissa Medialab/La cité
	11:00-11:15	Coffee Break		
	11:15-12:15	Answer to my boss	what do we expect, we would be extra motivated if we were asked to do..., we don't like to....	Hisa Eksperimentov
	12:15-13:00	Training of Explainers	-What training approach to use when employing new explainers? Long term developmental programme discussion on the topic	-Short Technopolis
	13:00-14:00	Lunch		
	14:00-14:45	Debates: training module part 1	-participants experience the activity as they were the public	La Cité
	14:45-15:25	Debates: training module part 2	Analysis of the activity (ies). Does it work to make people debates and why ? Do participants have similar experiences to share ? How to exploit the methods in other institutions?	La Cité
	15:25-16:15	Debates: training module part 3	-participants experience the activity as they were the public	Museo della Scienza
	16:15-16:30	Coffee Break		
	16:30-17:00	Debates: training module part 3 continuation	-participants experience the activity as they were the public	Museo della Scienza
	17:00-17:30	Debates: training module evaluation	Analysis of the activity (ies). Does it work to make people debates and why ? Do participants have similar experiences to share ? How to exploit the methods in other institutions?	La Cité/Museo della Scienza
	17:30-18:00	Debates	-EU best practices in the field	La Cité/Sissa Medialab

3rd April				
convenor	hour	title	content	speaker/ moderator
<i>Ecsite</i>	09:00-10:00	Consortium meeting	Closed meeting of the project partners	
	10:00-11:00	Inquiry-based learning	-from demonstration to enquiry-based learning	Pavilion of knowledge
	11:00-11:15	Coffee Break		
	11:15-12:00		-from exhibits to enquiry-based learning	
	12:00-13:00	Inquiry-based learning	-enquiry-based reasoning: how to dismantle a well-known scientific concept	Pavilion of knowledge
	13:00-14:00	Lunch		
	14:00-14:45	Inquiry-based learning	-final discussion: what can become an enquiry-based activity?	Pavilion of knowledge
Technopolis	14:45-15:45	The how-to session	-how to control your nerves, include someone who is excluding you, use your voice and body language, use your props properly, self evaluate,...	Technopolis/Hisa Eksperimentov
	15:45-16:00	Coffee Break		
Technopolis	16:00-18:00	Demo-session: I want to show you this...	-volunteers show their best practices (demo's, shows, debates,...). max.15min/participant!	all

4th April				
convenor	hour	title	content	speaker/ moderator
Technopolis	09:00-10:15	Website and pedagogic material	explainers get information on how to use the website and can try to log on.	Sissa Medialab
	10:15-11:00	Feedback from the trainees	filling in a questionnaire and discussion	
	11:00-11:15	Coffee Break		
Technopolis	11:15-12:30	And now Live!	Explainers perform in front of Technopolis public (approx. 10min/participant)	Technopolis
	12:30-14:00	Lunch	Explainers in tables of max 10, discussing with 3 project staff members. A free conversation based on simple and agreed guidelines trying to collect impressions, comments, criticisms,...	Sissa Medialab
<i>Ecsite</i>	14:00-14:30	Consortium meeting	Closed meeting of the project partners	
	14:30-16:00			
	16:00-16:30	Coffee Break		
<i>Ecsite</i>	16:30-17:30	Consortium meeting	Closed meeting of the project partners	
	17:30-18:00			
	18:00	Close		



Participants try out the Enquiry-Based Activities workshop.



One of the participants presents a demo from the Centre for Life, UK.



The workshop participants on the final day of the workshop.

3 Training Mechelen: session details

3.1 Sessions led by Sissa Medialab

3.1.1 *Explainer's self-portrait*

Paola Rodari in collaboration with Anne-Lise Mathieu, Cité des Sciences et de l'Industrie

The “Self-portrait” session at Mechelen course aimed to explore the complexity of the role of explainer in different institutions and different activities. Participants were asked to split into small groups (5-6 people) and discuss the issue using two sets of cards, linked to two discussion-games: the priority game (about “What a good explainer does?”) and the discussion continuum (about “Which kind of profession is to be an explainer?”). The following general discussion was animated by the main controversial points emerging from the work of the various groups and by the presentation some data from international surveys.

The two games, which in this case were used to discuss the profession of explainer, can also be used to stimulate debates among visitors on a chosen topic: from GMO to genetic testing, etc.. One just needs to re-adjust the sentences on the cards.

3.1.2 *The priority game*

Paola Rodari in collaboration with Anne-Lise Mathieu, Cité des Sciences et de l'Industrie

Participants split in groups of 5. Each group uses the same set of 8 cards, in which different actions are mentioned: showing phenomena, adapting to the public, provoking the debate... Members of the groups discuss among them the importance of these abilities with the aim of arranging the cards from the highest to the lowest in priority. Which one is the most important feature of a “good” explainer? Which gets the second place?

Groups are invited to discuss for 15 minutes. Then the lists coming from the different groups are collected, and the differences of opinions are examined in a general discussion lead by the facilitator (to help the general discussion and the comparison between different opinions one can - for example - use a pre-prepared power point presentation).

The results are also compared with data coming from other surveys, such as the one conducted in focus groups of Pilots partner institutions.

The discussion brings to light the different roles of explainers and the different missions of science centres and museums.

3.1.3 The discussion continuum

Paola Rodari

Participants split in groups of 5. Every group uses the same set of 15 cards, in which there are 15 sentences related to the profession of explainers (for example: “After a while the explainer gets bored. It is not a profession for all life”; “The explainer could give good advices to designers, because he/she knows how exhibitions work or don’t work”). Two more cards (with the words “Agree” and “Don’t agree” printed on them) are placed on opposite sides of the table. Taking turns, every participant reads a card and puts it down somewhere between “Agree” and “Don’t agree”, depending on his/her opinions. In doing that, he/she can move the cards that have already been laid on the table, creating a place for his/her card. When all the cards are on the table, the groups discuss among them if the line produced is acceptable for everybody or if they should agree on some changes. After 20 minutes, all groups report in a general discussion lead by the facilitator: were they able to organize a line accepted by all? Or were there issues on which they could not reach an agreement?

Comments on the sessions

In Mechelen the materials were used for the first time, although the formats have been used in many other situations. In general the session achieved its goals: the participants enjoyed the session and discussed a lot. A lot of general issues on explainers' status and role emerged, introducing also following sessions; many among the participants said that they will use the games in their own institution.

The text of the cards, nevertheless, has to be slightly corrected. In respect to the priority game, it has to be made clearer that the focus is on explainers' actions, what he/she really does when meeting the people, and it is not about the mission of the whole science centre. In respect to the discussion continuum game, the cards were too many, so that there was no time to discuss all the issues emerged. Probably it could be better to use less cards, written in a clearer way, focusing on principal problems connected to explainers' profession.

3.2 Sessions led by Hiša eksperimentov & Technopolis®

3.2.1 How to? Tips and Tricks

Luka Vidic (Hisa Eksperimentov) and Walter Ginckels (Technopolis)

The session was one hour of exploring different tips and tricks that come in handy when dealing with "tough" audience and keeping control over your presentation. Although the examples used during the presentation were taken out from science shows, this tips and tricks can be applied to almost any kind of interaction with the audience.

Aims:

- Sharing good practices for engaging audience in science communication.
- Exploring techniques for keeping control over your presentation.
- Getting acquainted with the tools for preventing, solving and balancing "tough" situations which may arise during presentations.

Comments on the session:

We should aim to get more suggestions from the audience. (More time at the end for a short "show and tell" with participants (sharing their ideas that work in practice).

3.2.2 Answers to my boss

Miha Kos (Hisa Eksperimentov)

The session was targeted for pilots (demonstrators...) as well as for the pilot's leaders. The idea came after the Ecsite Directors Forum that was held in Valencia, Spain. There the directors of different Ecsite member institutions met and discussed problems concerning human resources that are bothering them mostly. I collected some of the problems discussed and grouped them in three categories: Communication, Motivation of staff and Recruitment of staff. Six questions per category were chosen and each problem has been printed on a separate card... During the session participants were split randomly into six groups and each group got consequently one question per category to discuss. The participants have to think of themselves as being the CEO being confronted with the issues on the cards. They had a time slot of 10 minutes per question and a poster paper to put three best practices/solutions/suggestions on it. After the session, the posters were put on the wall in order for everyone to have a chance to browse through all the problems and "solutions".

The aim of the session was to inform the Pilots about the problems concerning them that are bothering their bosses. On the other hand it was also a possibility for the pilots to "become CEO for an hour" and give suggestions to their bosses. The purpose of the sessions of this kind is also to inform the real CEOs about the session and the results of it in order to open new vertical channels of communications.

Comments on the session:

It seems the pilots evaluated the session as very positive, useful, interesting and interactive. Therefore it is my intention to try to continue with the similar, slightly modified sessions in future courses.

Findings and possible improvements:

First: the time was too short. Not all group members had time to take part in suggesting solutions. Also with more time per question provided more structured

answers are to be expected. Maybe five to ten minutes more per problem is necessary.

Secondly and much more important - time for discussion is crucial for the success of the following sessions.

3.3 Sessions led by Technopolis®

3.3.1 Training of explainers

Walter Ginckels

A balanced and realistic training program is essential to support explainers in their professional growth and development. Therefore, Technopolis® prepared a presentation about the training of explainers at Technopolis®. During this presentation, the different phases of the explainer job were presented: from the first application interview, through initial “easy” demo’s like Van De Graaff generator, and further to more complex in-house shows and demo’s, until (as a final step) outreach events. The intermediate evaluation techniques (filming a show, meetings, discussions,...) were also presented. Due to time limitations (45 min), the session only consisted of this presentation and a short discussion on the topic.

Comments on the session:

Although the public experienced the presentation as interesting, two major drawbacks were mentioned:

- 1 Despite the possibility to discuss about the topic afterwards, the presentation was too much “ex cathedra” according to the feedback. A possible solution might be to work in groups on the topic after a (shorter) introductory presentation. For this approach, more time will be needed however.
- 2 The topic was too much presented from the point of view of a science center. Since there were also zoo- and museum-explainers present, the information

was not always that useful to them. An approach with group work (requiring input and experiences from the trainees) could avoid this problem.

3.4 Sessions led by Pavilion of knowledge

3.4.1 Enquiry-based learning

Sofia Lucas, Rosario Pereira

When we think about developing activities based on an inquiry-based approach we face a very complex field. The implementation is not a very easy process and for us it was a challenge. In this sense the session on inquiry-based learning was split into three modules of training:

- A) From demonstrations to inquiry-based learning
- B) From exhibits to inquiry-based learning
- C) Enquiry-based reasoning: how to dismantle a well-known scientific concept

The “Inquiry-based Learning” session at the Mechelen training course aimed to explore some aspects of both the design and structure of this type of activity. This kind of approach places visitors at the centre of the learning process. For each module we had a presentation, a practical activity and about one hour to explore it.

The module A helped to explore the role of explainers in different situations. The main idea was to find out what is a visitor-centred enquiry-based activity. The 3 groups of explainers explored three situations (each one dealt with one situation): a simple demonstration (entirely done by the trainer with explainers listening and watching), an interactive situation where the trainer engaged with the explainers to carry out an activity and, finally, the explainers faced the activity as an enquiry-based experience. Following the activity each group analysed what happened taking into account certain parameters of discussion given by the trainer (such as the type of interaction, who controls the activity, the skills needed, etc). At the end we gathered the entire group, shared results and draw some useful conclusions about

the role of the explainer in a museum or science centre in order to enhance the learning process.

The module B proposes an example of an enquiry-based activity with a mathematical theme. We tried to make explainers discuss how to design and conduct an enquiry-based activity related to an object present in a Museum or Science Centre. The manipulation of the object helps to analyse and discuss the characteristics of an enquiry-based activity as well as reflecting on ways in which visitors can benefit from the contents associated to the activities.

The module C focuses on the design of activities suggesting an exercise for disassembling complex scientific issues. Groups of explainers chose a scientific concept or a topic and presented ways to understand it easily.

Comments on the session:

We believe that we succeeded in conveying the main idea: explainers understood the differences between the approaches they can develop in Museums and Science Centres, specially the quality of the learning provided. We notice that the explainers had some difficulties in resolving the tasks proposed in modules B and C. We believe that one of the reasons is related to the need of having a good scientific background on the subject of the activity. Another obstacle is that they are not use to make this kind of approach. Although they had a few problems in understanding and start carrying out the task, at the end they were pleased to experienced and consider it very useful and important to their daily work. Enquiry based learning seems to provoke people to share their knowledge and experience in a pleasant way. We think that the theoretical and practical components were in balance. Although there was a lack of time for discussion we think that explainers made good contributions to the overall reasoning and the final conclusions were very fruitful and productive. For the next training course we should take into account two things: first we need to give more clear conclusions and second we should give more time for discussion.

3.5 Sessions led by Cité des sciences

3.5.1 Tools to organize debates and discussions

Anne Lise Mathieu

This first training session on debate was organized because we identified the need to give the explainers tools to interact with the adult public. This public has needs and questions that differ from the children and one of their specificities is the need to discuss around science and society, to discuss the ethical aspects of new scientific discoveries and their application.

Our training session was composed of two parts.

1 Engage in a debate on biometry

Explainers participated - as would the general public - in this activity. The activity consists in the presentation of real ethical issues that occurred with the use of biometric technical devices. The explainers are asked to play the role of members of a European institution in charge of the authorization of these technical devices. They have to discuss each case (for example : can we allow the use of a hand –recognition device in a school to give the pupils access to the school cafeteria ?).They have to identify the arguments in favour and in disfavour of this use. Then each participant votes anonymously with a technical device and the decision of the group on the case is analysed and compared with the real decision. This sample debate activity on biometry is lead with the help of a power point presentation

2 Analyse the activity

Explainers analyse this activity with the tutor, trying to summarise together all the aspects of “what works” and “what does not” when you try to make adults debates.

A discussion is engaged at the end try try to find solutions to adapt this kind of tool to other topics or other configurations. This collective group analysis can be led with the help of a power point presentation

Comments on the session:

For the practical part the participant asked a lot of questions to help them make their opinion and the participation was quite good. They really engaged in the activity. The vote device was particularly appreciated. The language barrier was nonetheless sometimes an impediment in the explanations that could be given by the tutor and in the arguments discussed by the participants. This difficulty slowed down the activity and only one real case was discussed.

For the analysis of the activity : a lot of practical responses was found by the explainers, on how we can make the adults discuss, on what must be the role of the explainer in that kind of activity with adult public, but once again the language barrier and here, the use of the powerpoint, slowed down the rhythm.

Another challenge was that a lot of explainers in their institution were not used to modifying their behaviour to deal specifically with adults, and some found it challenging to adapt the tool for use in their institution.

Improvements for the future courses: Try to find a better rhythm and a better equilibrium between the activity part and the analysis of what works with adults.

3.6 Sessions led by Museo della Scienza e della Tecnologia Leonardo da Vinci (MNST)

3.6.1 How to engage visitors in a discussion about science and technology?

Sara Calcagnini

The aims of the session were:

- play two discussion games (Taboo, Debate Continuum)
- present techniques of informal discussion about science
- discuss how to use them at home, experience MNST
- integrate these techniques in the debate science in society

The games played by the participants have been:

1. Discussion continuum
2. Taboo

Participants have played the games and have been asked to discuss the impressions about the games and how to use them in their home institutions.

Then I have presented the experience of the MNST, how the games have been used in the museum for different purpose and in different context.

In the final part I connected the games with the general debate about the relationship between science and society. In the conclusion we discussed the issue raised by the presentation.

Comments on the session:

The general idea of the session was to show participants how simple tools like card games can be used and can engage visitors in the discussion of contemporary scientific topics.

Starting from the tools the idea was discuss the role, capacity and ability of museums to manage scientific discussions.

Participants seemed to get the main messages of the presentation, they appreciated the games although maybe they found the final part less interesting, but the timing was fine.

4 Training Milan: overview

The training encompassed a two day course at the Museo della Scienza e della Tecnologia Leonardo da Vinci as pre-conference for the Ecsite Annual Conference, that took place in Milan. Trainees from all over Europe subscribed.

In total, 57 people participated: 13 project partners involved in the implementation of the course, 36 explainers from external institutions, and 8 explainers from project partners. The following participants were present:

Gerid Hager	Education and Culture Mediation	Ars Electronica Linz GmbH	Linz	Austria
Sara Hossein	Project leader	Science Center Netzwerk	Vienna	Austria
Ulrike Oberhammer	Project leader	Science Center Netzwerk	Vienna	Austria
Michael Creek	Projects Coordinator	Ecsite	Brussels	BEL
Walter Ginkels	Supervisor edutainment	Technopolis @, the Flemish Science Center	Mechelen	BEL
Jindřich Káza	Edutainer	Techmania science center o.p.s.	Plzen	CZE
Ondrej Fuksa	Edutainer	Techmania science center o.p.s.	Plzen	CZE
Michaela Petrikova	Program Manager	Techmania science center o.p.s.	Plzen	CZE
Ayman Elsayed	Head, Educational Programs and Exhibitions Section	Bibliotheca Alexandrina ALEXploratorium	Alexandria	Egypt
Merja Nuutinen	Explainer Team manager	Heureka - The Finnish Science Centre	Vantaa	Finland
Pia Mäkelä	Explainer	Heureka - The Finnish Science Centre	Vantaa	Finland
Sally Duensing	Consultant & Visiting Professor	King's College London	Neuilly sur Seine	France
Anne Lise Mathieu	Head of service	La Cité des Sciences & de l'Industrie	Paris	France
Olivier Richard	Chargé de programmation DAC	La Cité des Sciences & de l'Industrie	Paris	France
Gilles Mangeret		La Cité des Sciences & de l'Industrie	Paris	France
Fabrice Jouvenot	Mediateur Scientifique	La Cité des Sciences & de l'Industrie	Paris	France
Francesco Maria Atzeni	Student	Associazione Le Strade di Macondo	Monserato	Italy
Matteo Merzagora	Collaborator	ICS - SISSA	TRIESTE	Italy
Pietro Olla	President, Educator,	Le strade di Macondo	Cagliari	Italy

Ilaria Claudia Esposito	Circus Performer Explainer	- Circus&Science Museo dei Bambini	Rome	Italy
Alessia Bello	Explainers Resp	Museo dei Bambini	Rome	Italy
Camilla Rossi- Linnemann	International Relations and Education	Museo Nazionale della Scienza e della Tecnologia 'Leonardo da Vinci'	Milan	Italy
Paola Rodari	Coordinator, Science Museums	Sissa Medialab	Trieste	Italy
Enrico M. Balli	Chief Executive Officer	Sissa Medialab	Trieste	Italy
Vincent Blech	Science Communicator	National Museum of Emerging Science and Innovation (Miraikan)	Tokyo	Japan
James Bell	Director, Centre of Learning Department	Petrosains - The Discovery Centre	Kuala Lumpur	MLS
Saiful Bahri Baharom	Director, Internal Programs Dept.	Petrosains - The Discovery Centre	Kuala Lumpur	MLS
Ingeborg Veldman	Coordinator Science LinX	Science LinX - University of Groningen	Groningen	NL
Renske de Jonge	Outreach officer	Science LinX - University of Groningen	Groningen	NL
Jelle de Jong	Managing director	Stichting Techniekpromotie	Eindhoven	NL
Bartosz Stodulski		Copernicus Science Centre	Warsaw	Poland
Pawel Wojcik	Program Consultant	Copernicus Science Centre	Warszawa	Poland
Julia Huszcz		Copernicus Science Centre	Warsaw	Poland
Marta Fikus- Kryńska	Programme Department	Copernicus Science Centre	Warszawa	Poland
Antonio Gomes da Costa	Director	Pavilhão do Conhecimento - Ciência Viva	Lisboa	PT
Rosario Pereira	Team Leader - Education Department	Pavilhão do Conhecimento - Ciência Viva	Lisboa	PT
Sofia Lucas	Educational Assistant	Pavilhão do Conhecimento - Ciência Viva	Lisbon	PT
Margarida Borrvalho	Explainer	Pavilhão do Conhecimento - Ciência Viva	Lisbon	PT
André Almeida	Explainer	Pavilhão do Conhecimento - Ciência Viva	Lisbon	PT
Paula Robalo	Educational Department	Pavilhão do Conhecimento - Ciência Viva	Lisbon	PT
Luka Vidic	Activities editor	Ustanova Hisa	Ljubljana	SI

Miha Kos	Director	eksperimentov - The House of Experiments Ustanova Hisa eksperimentov - The House of Experiments	Ljubljana	SI
Melita Korošec	Demonstrator	eksperimentov - The House of Experiments Ustanova Hisa eksperimentov - The House of Experiments	Ljubljana	SI
Neda Tompa	Demonstrator	eksperimentov - The House of Experiments Ustanova Hisa eksperimentov - The House of Experiments	Ljubljana	SI
Sabina Založnik	Human Resources	eksperimentov - The House of Experiments Ustanova Hisa eksperimentov - The House of Experiments	Ljubljana	SI
Francisco Doménech		Museos Científicos Coruñeses	A Coruña	Spain
Esther López Torres	Education project manager assistant	Museu Agbar de les Aigües	Cornellà de Llobregat	Spain
Marta Soler Artiga	Edutainer	Museu Agbar de les Aigües	Cornellà de Llobregat	Spain
Johanna Junback	Education Officer	Nobel Museum	Stockholm	SE
Emma-Kara Nilsson	Pedagog	Universeum AB	Göteborg	SE
Ahmed Mébaoudj	Planning Explainer Services	Technorama	Winterthur	SWI
Nicola Stock	Education Officer	Centre for Life	Newcastle Upon Tyne	UK
Brad Irwin	Learning Operations Manager	Natural History Museum	London	UK
Melissa Gilmore	Team Leader Interactive Galleries	Science Museum	London	UK
Jennifer Correa	Senior Manager of Explainers	New York Hall of Science	Queens	USA
Preeti Gupta	Senior Vice President, Education & Family Programs	New York Hall of Science	NY	USA
Abdulaziz Alariqi	Chairman of Executive Unit	National Science Museum Project	Sana'a	Yemen

Tuesday 2nd June 2009

hour	title	content	moderator
8:30-9:00	Reception of participants and breaking the ice		
9:00-9:40	Plenary session "State of the Art": the Who-What-How of cross-European explainers	Recapitulation of previous activities and results of qualitative surveys . Launch of topics for next session.	Sissa Medialab Cité des sciences
9:40-10:55	Discussion: Help your boss! <i>parallel sessions:</i> juniors and seniors/managers	Juniors: Answers to my boss "Pilots community helping the CEO community for a better future": job content - target groups- what problems are you confronted with? How do you develop educational content? Seniors/managers: position of explainers in institution's organigram - job responsibilities for explainers/floor staff - problems encountered - how to train explainers	Hisa Eksperimentov Technopolis
10:55-11:10	coffee break		
11:10-11:50	concluding discussion after parallel sessions	priorities for Juniors vs. Seniors from the point of view of policy, strategy, educational approach and training.	Hisa Eksperimentov Technopolis
11:50-13:00	Diversity bit: Panorama on diversity	Best practices in dealing with diversity in cultures, social background, level of education, gender, purpose of visit, etc... participant are asked to present their experience in a reverse session.	THE group
13:00-14:30	Lunch		
14:30-15:45	Pilots module: science shows and demonstrations as a tool	How-To...control your nerves, get attention, build the tension, use voice and body language, include underprivileged people, include someone who is excluding you,...	Technopolis, Hisa Eksperimentov,...
15:45-16:15	Coffee break		
16:15-17:30	Pilots module: enquiry-based learning	Talking about enquiry-based learning: activities, attitudes and skills	Pavilion of knowledge
17:30-21:00	Evening program free podium: informal but informative	Present the best practices, favorite experiments and approaches of your own institution! (hands-on, dialogue, participatory role plays,...)	Technopolis, Hisa Eksperimentov,...

Wednesday 3rd June 2009

hour	title	content	speaker/ moderator
9:00-10:15	Diversity bit: Workshop	Dealing with diversities. How to spot diversities among the visitors and design the correct approach to address them.	Sally Duensing, THE group
10:-15-10:30	Coffee break		
10:30-12:00	Pilots module: Debate as a tool	Debate with Cité des sciences as moderator and participants as the public (1h) Discussion and evaluation (1/2 h)	Cité des sciences
12:00-12:30	Panorama on debates	Best practices in organising discussions and other participatory events. Present your own experiences in this reverse session!	Sissa Medialab
12:30-14:00	Lunch		
14:00-15:00	Problems and Solutions. Group discussions for juniors and seniors/management	a) You propose a difficulty encountered in dealing with a specific problem yourself by writing it on a wall. Those who have the same problem or a possible solutions gather in groups and elaborate a common solution.	Matteo Merzagora, Antonio Gomes da Costa
15:00-15:30		b) after the brainstorming in small groups, you present/act out your results and discuss these in a plenary session.	
15:30-15:45	Coffee break		
16:00-17:45	Information about THE group and subsequent open meeting.	Where are we in the construction of an international community of explainers? Discussion on topics and focus of interest for future actions of THE group.	THE steering committee
17:45-18:00	Closing		

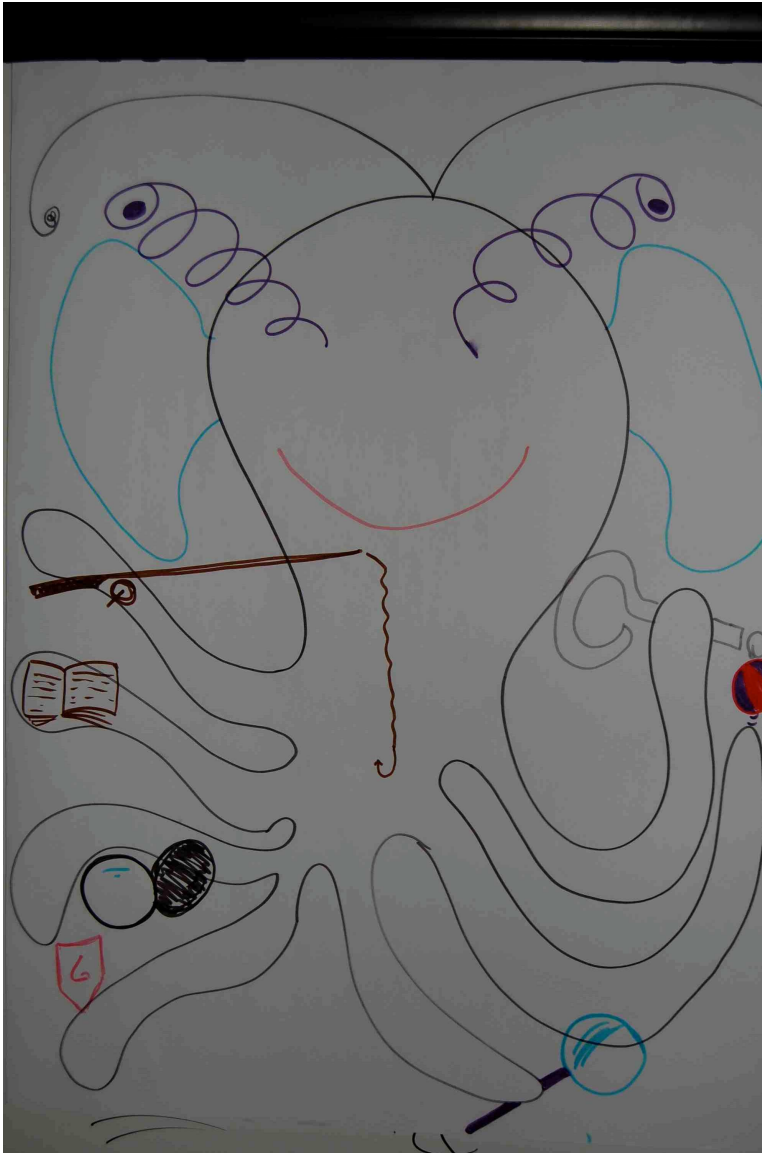


Participants get into discussion at the Milan training course.





"Answers to my boss" in Milan



One of the posters from the ice-breaking session: draw an explainer

5 Training Milan: session details

5.1 Sessions led by Sissa Medialab

5.1.1 *Panorama on debates*

Paola Rodari

The “Panorama on debates” session aimed to present the strategies science centres and museums follow for presenting current research.

Current science often involves social, economical and ethical aspects, and therefore it is at the centre of discussions and controversies, like in the emblematic case of GMO. Science centres and museums offer dedicated spaces and activities for engaging visitors in science and society issues:

- Temporary exhibitions (frequently updated)
- Dialogue exhibits (that collect public opinions)
- Meetings with the scientists
- Activities as science debates, science café, citizens juries, role playing, cards games, ...

Goals of these strategies are:

- To giving reliable updated scientific information to everybody
- To present the interconnections between science and society
- To help the people to formulate their own opinion
- To present a model of structured, democratic discussion.

Two projects offer successful examples of new formats for debating science and society issues: DECIDE (www.playdecide.org) and Citizenscience (www.at-bristol.co.uk/cz). After a short powerpoint presentation, the participants at the Milan training experimented the “discussion continuum” on genetic testing, a discussion game developed in the Citizenscience project. That was an occasion to reflect on facilitator’s role during debates on sensible issues.

Comments on the session:

We think the session had the right balance between information, theory and practice, and for what we could see the people enjoyed it. The discussion continuum game they played it is a very good one, and it is a wonderful example of how to debate on very sensible issues. All the groups had a good discussion, and the final general discussion was absolutely very productive. We gathered all together sitting on the carpet, and did not use the microphone. This has created a very soft, concentrated and calm environment, that helped a fruitful discussion on how to tackle controversies among the visitors. The time left for the session was, in our opinion, enough, also if some more time for the discussion could always be welcome. A possible improvement of the session could be give time to the participants to invent their own card game. At least 1,5 hours should be dedicated to that: 40' minutes for developing a proposal (in groups), 20' to play at least one of the game each group (maybe exchanging the games among the groups), and 30' for a final general discussion/evaluation of the developed games.

5.2 Sessions led by Hiša eksperimentov & Technopolis

5.2.1 *How to? Tips and Tricks*

Luka Vidic (Hisa Eksperimentov) and Walter Ginckels (Technopolis®)

During the training course in Mechelen, Hiša eksperimentov® and Technopolis® demonstrated some examples on *how to* address difficult issues while presenting a science promoting activities (show, presentation, demonstration,...). After the Mechelen Pilots training course the pedagogical material was submitted to the Pilots Hub. The participants of the Milan Pilots training course (held during the Ecsite pre-conference) were advised to become familiar with the contents of this material before attending the course.

Although the results of the Mechelen “How to...” workshop were good, the survey showed the lack of involvement of the participants (sharing their problems and ideas with each other). We therefore decided to give participants more time to share their experiences during the Milan workshop.

We started with a short summary of the “How to...” workshop materials and with a brief outline of the workshop ahead. The participants were then divided into five groups.

For the first part we presented five questions, which were selected as important from the previous workshop:

- How to get adult volunteers?
- How to make an activity interesting for both adults and children?
- How to simplify without losing content?
- How to keep the attention of your audience?
- How to deal with controversial issues?

After selecting two of the above questions, groups determined the type of the activity, target group and number of participants.

The participants came up with their own solutions, examples,... on how they deal with these problems in their science center, museum, institution,... based on their own experiences.

Because of the success of the Mechelen “Answers to my boss” workshop methodology and taking into account the survey results of the Mechelen “How to...” workshop, we wanted to give participants time to exchange their questions, experience and skills. Therefore each group first had to come up with one or two questions with the “how to” topic (some questions were presented as a guideline).

The groups came up with the following questions:

1. How do you mediate conflict among audiences during your presentation?
2. How to deal with visitors who want to show their high knowledge by asking questions that you can't answer? (visitor challenging you...)
3. Is there a “perfect” way to invent, then develop a new project? (ex: a science workshop?)
4. How do you involve teenagers? (what workshops/activities?)
5. How to deal with “people” who disagree with your concepts/work (teachers, parents, religious background)
6. How do you (or should you) manage a disruptive audience during a science show (or theater)??
7. How to convince people to sponsor activities of your museum?

The groups then exchanged questions with other groups and tried to provide answers for each other. Each group presented their answers to another groups' questions.

Comments on the session:

Considering the responses of participants and the evaluation results, the first part of the workshop should be more interactive with more background information and more “tips and tricks”. The structure of the workshop was perhaps too similar to the “Answers to my boss” workshop and others which preceded it. Therefore the work in groups (and flipcharts) was not as appreciated anymore and should be substituted with another form of interaction.

Not all participants were familiar with the pedagogical material from the first workshop. This (in some cases) resulted in initial confusion about the goals of the first part of the

workshop. Next time we should not rely on “the homework” but provide more pedagogical material at the beginning of the session (both as introduction into the topic as well as motivation) in a form of dynamic presentation (resembling the “tips and tricks” demo).

Taking all the above into account, we propose the following for the “How to...” workshop on the next training course (Paris): The first part of the workshop should resemble the “How to...” workshop from the first training course. It will provide some approaches on how to deal with difficult issues. It will also induce an open debate and introduce the second part, where participants will form groups and try to answer each other’s questions (as in the second part of the Milan workshop).

5.2.2 Helping my boss

Miha Kos (Hisa Eksperimentov) and Walter Ginckels (Technopolis®)

As in the first workshop, the session was targeted for explainers as well as for the explainers’ leaders. Explainers were in minority in the group. However, since the idea of the workshop was to let the explainers (as well as explainers’ leaders) take the role of the CEO and try to solve CEO's everyday's problems, the fact that the explainers were in minority wasn't so bad.

The idea of the session came after the Directors forum that was held in Valencia, Spain. There the directors of different Ecsite member institutions met and discussed problems concerning human resources that are bothering them mostly.

After analysing the results of the first workshop, we decided to replace some questions. Some Science Centre CEO's were contacted and some generated some fresh questions.

During the session participants were split randomly into several groups and each group got consequently one question per category to discuss. The participants have to think of themselves as being the CEO being confronted with the issues on the cards. They had a time slot of 15 minutes per question (five minutes more than in the previous training) and a poster paper to put three best practices/solutions/suggestions on it. After the session, the

posters were put on the floor in order for everyone to have a chance to browse through all the problems and "solutions".

The aim of the session was to inform the Pilots about the problems concerning them that are bothering their bosses. On the other hand it was also a possibility for the pilots to "become CEO for an hour" and give suggestions to their bosses. The purpose of the sessions of this kind is also to inform the real CEOs about the session and the results of it in order to open new vertical channels of communications.

Comments on the session:

It seems the pilots evaluated the session as very positive, useful, interesting and interactive. Therefore it is our intention to continue with the similar, slightly modified sessions in future courses.

It would be interesting to follow the responses and discussions of more homogeneous groups. It is therefore our suggestion that at the next course more explainers should take part. The time slot could be longer but on the other hand it was much better than the short time slot we have in the first school.

See Annex A: Feedback to Ecsite board

5.3 Pavilion of knowledge

5.3.1 Enquiry-based learning

Sofia Lucas

The session on enquiry-based learning aimed to give explainers the opportunity of designing enquiry-based activities related to exhibits present in museum or science centres. This kind of approach makes the visitor/learner the centre of the learning process leading to a more effective apprenticeship. To do this we had a presentation, a practical activity which included a discussion grid and photos with descriptions of a few exhibits and about one hour to explore it.

During the practical activity we requested the explainers to choose an exhibit at will; that made the selection of the work groups. Taking into account the chosen exhibit, we asked them to develop practical activities or simple experiments, to be performed autonomously by the visitor, allowing the discovery of the interactive exhibit. The idea is that the visitor can drive his own process of meaningful learning. During the development of the activity, explainers promoted the discussion in small groups and after that the dialogue was made by the entire group. This second phase of sharing is important when we are raising awareness on informal learning.

Comments on the session:

At the beginning we had the impression that participants were a bit lost although the explanations were very clear. Although this approach gets more positive results for the learners, explainers are positively sure when saying “We will have much more work!” They realise the importance of developing these kind of approach but they conclude that they will need more time to prepare all the materials, a good scientific background it’s very useful when we try to link together experiments and exhibits. We believe that we kept a balance between the practical and the theoretical components of the training session. For the next training course we should keep in our minds that explainers want a deeper conclusion on these contents.

5.4 Cité des sciences

5.4.1 How to make adults debate?

Anne Lise Mathieu

This set of sessions on “ways to engage adults in debate” was designed to help identify the characteristics of activities that help adults express their opinion and share ideas. It is very often said that adults do not participate much in the activities that are proposed to families, that they leave their children interact, staying in the background. But we believe that Science Centres and Museums are for adults as well.

The session was similar to that of Mechelen, but we tried to go further in the analysis of what works with adults. It was made of the same two parts:

1_Engage in a debate on biometry

Explainers participated - as would the general public - in this activity. The activity consists in the presentation of real ethical issues that occurred with the use of biometric technical devices. The explainers are asked to play the role of members of a European institution in charge of the authorization of these technical devices. They have to discuss each case (for example: can we allow the use of a hand –recognition device in a school to give the pupils access to the school cafeteria?) They have to identify the arguments in favour and against this use. Then each participant votes anonymously with a technical device and the decision of the group on the case is analysed and compared with the real decision. This sample debate activity on biometry is lead with the help of a power point presentation

2_Analyse the activity

Explainers analyse this activity with the tutor, trying to summarise together all the aspects of “what works” and “what does not” when you try to make adults debates. A discussion is engaged at the end to try to find solutions to adapt this kind of tool to other topics or other configurations. This collective group analysis can be led with the help of a power point presentation

Comments on the session:

The activity provoked a lot of questions and reactions during the session that lasted much longer than initially planned. Doing this training module twice has permitted to polish it. But the question remains of how to propose this kind of tools to explainers who are not used to dealing specifically with these topic or target groups in their institution.

5.5 Sessions led by external speakers

5.5.1 Dealing with diversities: problem and solution

Matteo Merzagora, Antonio Gomes da Costa

The session was aimed at collecting and sharing experiences from the audiences concerning how to deal with diverse public in face to face interactions.

The session was originally planned as a two step format. In the first step, participants would have written their “case” on a purposely set up wall; in the second step, participants would have reacted by either sharing the same problem, or proposing a solution they had experimented or they planned to experiment. However, a very similar session was organised on day 1, and evaluation showed that participants were tired of repeating the same format over and over.

A decision was taken to modify the session toward a much freer and unstructured discussion.

A striking video was presented and a little game was played with the audience, showing unintentional hiding of relevant information in our perception of a situation. This was used to introduce the fact that each time we face our visitors, there is a whole lot of diversity that we might miss. This can cause problems to the quality of the communication on the one hand, and on the other hand it is a missed opportunity to use diversity to enhance the communication.

A series of input taken from the discussion of other sessions were used as a trigger for the discussion.

Comments on the session:

The audience responded to the provocation, and introduced a number of discussion subjects spontaneously. A specific focus emerged, on gender barriers and possible ways to overcome them.

The session lowered the ambition of its original aims when renouncing to a playful format, showing that the topic remains often unchallenged in most institutions. However, due to a clear fatigue in the participants, this was probably at the end of the day a good choice.

Participants who had the energy and felt they had something to say had a chance to express themselves, others took the chance to have some mental rest.

The session was meant as a free discussion, with all the limits associated to this. In the economy of the overall training, this is not a negative point, but some participants expecting practical advice might have benefitted less from this.

A link between the outcome of the session and the session on “Face(s) to face diversities” within the ECSITE AC was originally sought. This was only partially achieved.

5.6 The Diversity Bit

Report by Paola Rodari, SISSA Medialab, Trieste, Italy

Explainers in science centres need to interact with very inhomogeneous groups. The public is very different in terms of values, beliefs, origins, cultural level, age, gender or simply motivations for visiting. How to deal with such diversities in face to face interactions?

Here below the list of participants contributions.

Explainers Co-generate Local Theory about Visitor Interactions at the NY Hall of Science

Preeti Gupta, New York Hall of Science

One conversation that has emerged among Explainer staff is how to engage a group of people (students of same class or even family unit) such that each person is interested in the interaction. How do floor staff relate to children of different learning levels or learning styles? How do floor staff relate to the parents as well as the children? How do we determine the motivations for why a person is visiting in a short time and address their interests? Gupta presented an attempt to answer these questions through a series of meetings called cogenerative dialogues.

Female visitors and exhibition preference

Michaela Petrlíková Program Manager, Techmania Science Center - Regionální technické muzeum o.p.s., Pilsen Czech Republic

Techmania Science Center, opened in November 2008, has four exhibitions. One of them is the EDUTORIUM, which discusses many physical and mathematical phenomena.

Stereotypically, women are said to be less “in tune” with or attracted to such analytical sciences. Whether true or not, the staff has noticed that the female visitors are less attracted to this exhibition than to other ones. They usually stay back when there are groups, or generally shy away. Techmania Science Center would like to figure out how they can make the EDUTORIUM more attractive to all our visitors.

Diversities

Saiful Bahri bin Baharom, Petrosains Sdn. Bhd.

Due to our location, history and demographics, Petrosains, in Kuala Lumpur, Malaysia has unique opportunities and issues when it comes to addressing the diversity of our visitors and audiences. Possessing a rich mix of Malay, Chinese, Indian ethnicities, as well as 18 different indigenous groups on Peninsular Malaysia alone, Malaysia provides a heterogeneous pool of life-long learners who inspire, stimulate and challenge our on-site and outreach facilitators in interesting ways. Language, values and belief systems are among the challenges the staff is continually strategizing to address. Petrosains presented their case as well as invited input and suggestions from lessons learnt elsewhere.

Older visitors, new public

Paula Robalo, Ciencia viva, Lisbon, Portugal

Needs and expectations of older visitors. An experience of dedicated programmes.

Communicating with children

Marta Fikus-Krynska, Copernicus Science Centre, Warsaw, Poland

An overview of the programmes dedicated to small children of the Copernicus Science Centre.

Science and memories

Marta Soler Ortega and Esther López Torres, Museu Agbar de les Aigües

How to engage in science families and elderly, with the mediation of their memories.

The presentations stimulated and interesting debate about the challenges and difficulties the floor staff need to face, and many solutions were exchanged among the different institutions.

In every training course should be left time for these exchanging of practices and problems, that is without doubts very useful, and seems also to be one of the most appreciated ingredient of explainers training courses.

6 Annex A: Feedback to Ecsite board

The training course in Milan was preceding the Ecsite board meeting. In order to broaden the knowledge of the Pilots project itself as well as for gathering new participants in following Pilots schools the results of the workshop were informally presented at the board meeting. The material that each of the board members got during the board meeting was the following:

Helping my boss

(A session at THE Group meeting & Pilots training school)

An inspiration after the Valencia Directors' Forum

by Miha Kos (Hiša eksperimentov) & Walter Ginkels (Technopolis)

Participants (junior and senior explainers) were put into 6 groups. They had to close their eyes and after counting to 10 they were »hypnotized« and became the CEO of their own institution. Each group had to discuss for about 15 minutes about a problem that might be a problem that a CEO (or some sort of director) has to deal with. In turn each group got a different problem concerning communication, motivation and recruitment.

Each group had to come out with three suggestions and put them on a poster. So, in the end there were 6 groups X 3 sorts of questions = 18 posters.

The second part of the session was the general discussion, where some of the suggestions were chosen and communicated.

Participants were also asked to compose their own questions from the point of view of the boss that will be discussed at the next Pilots training course in January 2010.

The discussion was moved to the HUB - a webplatform for explainers/demonstrators/pilots at www.thepilots.eu

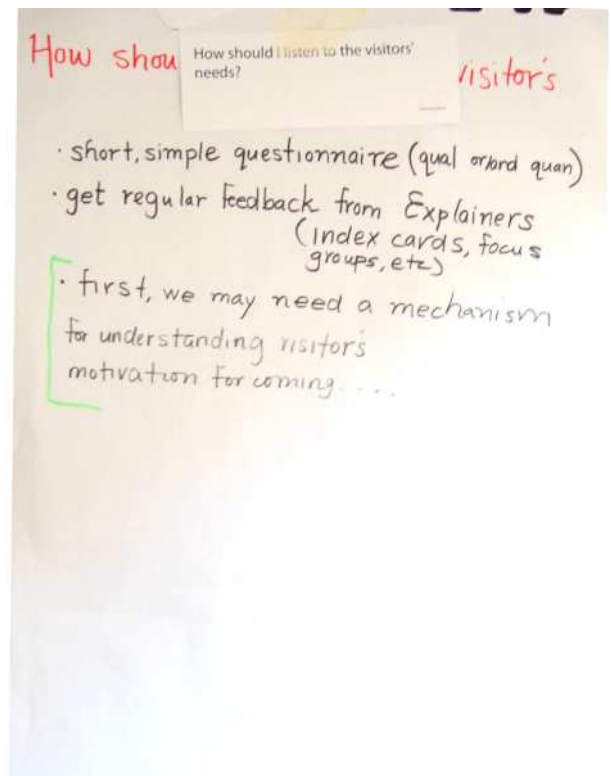
The session showed substantial interest of explainers to help in the processes of building improved communication, motivation and recruitment policies in their own institutions. Explainers are eager to communicate with their colleagues working in

other similar institutions around the world. The mission of EU project called PILOTS as well as Ecsite's interest group called THE GROUP encourage their initiative.

Dear board members of ECSITE,

You are welcome to browse through the posters produced by the session and encouraged to support your explainers in joining the HUB. I would also like to ask you to post me other questions you would like to be discussed at the next PILOTS training course in Paris in January. But most of all, you are encouraged to send your most communicative explainers to the course in Paris. It is a win-win investment.

Miha Kos, Hiša eksperimentov (partner in PILOTS project, member of THE group and the ECSITE board member)



ONDRA

JENNY

FRAN

What kind of channels for listening to the pilot's suggestions should I open and allow? Should there be different methods for different levels of importance? —

- FOCUS GROUP (EXPLAINERS)
↳ OUTCOME IS REPORTED
- REGULAR MEETINGS
(CEO, REPRESENTATIVE WHO IS AN EXPLAINER)
- MESSAGES GO TO THE MEDIATOR WHO DECIDES WHO ANSWERS

ABDULAZIZ
ABDULAZIZ

AYMAN
NAYAN

INGEBORG

LUKA

mentorship

professionalism

respect

empathy

compassion

objectivity

When am I the boss and when am I the friend of the explainers?

WHAT

What are my responsibilities? —

ONSIBILITIES

- ① Must have vision, mission, goals to achieve and communicate it to staff.
- ② Must make everyone work to achieve all vision, mission, goals etc.
- ③ HE MUST HAVE OPEN EARS
① (...To suggestion from explainers!)

What ways of communication should I approve when pilots do not agree with their supervisor? —

1. direct communication
Supervisor ↔ pilots
2. regular communication
fixed times, methods
3. mediator for big problems
(professionals!)

How do you keep your staff members involved in the organisation so that they gain a feeling of ownership?

1. trust your staff

2. "space" for ideas

3. encourage staff to propose / develop IDEAS

How does the staff gain a sense of responsibility?

- engagement, acknowledgment, and consistent collection of ideas from floor staff in short intervals
- routine work coupled w/ project work
- a ladder-like structure where people grow into more responsible roles
- creating structures where people recognize and buy-in to the value of their jobs to institutional mission
- having the agency, the power to act, to solve basic problems and praised for taking the initiative.

What are the goals, values and mission of your institution?

① EVERYBODY TO HAVE/EXPERIENCE THE JOY of discovery
* PEOPLE IN GENERAL

② LEARNING (BY DOING WHEN IS POSSIBLE)

③ BRIDGING BETWEEN PUBLIC AND EXPERTS

How do you build team spirit?

→ PROJECT WORK

→ AWAY DAYS

- ONCE A YEAR OR TWO
- thematic
- Includes visiting other institutions

→ PARTY

- 2 OR 3 a year
- for special occasions (in the institution)

→ THE THREE O'CLOCK COFFEE

→ SPORTS (Basket, football...)

→ REGULAR MEETINGS/BRIEFINGS

Should we as managers occasionally work »on the floor«?

I WOULD LIKE TO SEE THAT!

BASIC TRAININGS IN ACTIVITIES
↳ DO V.I.P. TOURS THEMSELVES

SHARING EXPERIENCES WITH STUFF
↳ FEEDBACK

MANAGERS

EXPLAINERS

How do you build and maintain a high level of staff motivation?

- recognition
- social events
- conferences (etc.)

- challenge
- evolution

- evolution
- more responsibility
- training

VINCENT

HARTA

FRANCESCO

MICHAELA

JELLE

What are the positive benefits in recruiting young women, pregnant women, disabled persons, ...

DISABLED: INFORMATION ABOUT THE ACCESSIBILITY (TO THE INSTITUTION/VISITORS) (SCIENCE IS FOR ALL)

PREGNANT: COMMITMENT & LOYALTY

YOUNG: VERY ENTHUSIASTIC
OPEN TO NEW THINGS
HIGH ENERGY

What attracts people to become and stay explainers?

* exchange science with people (give explanation & receive)

* dynamic work
(meet new people, new challenges, activities)

* what's the next?

MICHAELA

JELLE

VINCENT

HARTA

FRANCESCO

