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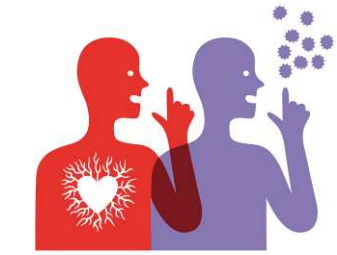

PILOTS

cité des sciences & de l'industrie

Professionalisation for learning in technology and science
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D3.4: WP3 Final report of needs assessment

Workpackage 3: Assessment of needs

Workpackage leader:

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1 Summary

The main objective of the qualitative and quantitative surveys designed in this project was to investigate the profile, roles and training practices of explainers in museums and science centres in order to identify their training needs, focusing on the role of explainers in adult lifelong learning and engagement in science and technology.

The first step, the qualitative survey, aimed to collect explainers' training needs and self-perception, in order to help the design of PILOTS training courses.

This survey was also a means to lead to a better understanding of the cultural role of the explainers in their institutions. After some preliminary analysis of the job's representation, the analysis was built around two main points. First, to clarify the day to day activities of the explainers, their role and their concerns, in order to bring to light the essential skills and know-how involved in the job. A second part focussed on the training: the explainers' professional background and their initial training in their institution and then their training needs.

In order to have a first insight of the explainers training needs, to help design the first tools and training session of the Pilots project, we limited ourselves to interviewing the Explainers of the Pilots project' partners. This is described in full in *D3.2 Report on the needs of explainers*.

The second study carried out as part of the PILOTS project, described in full in *D3.3 Report on the profile of European explainers* aimed to supplement the information obtained from focus groups by means of a quantitative survey on an expanded sample of European explainers. More particularly, it focused on the profiles of science explainers working within European institutions, as well as their roles and training needs. For the purposes of the study, a questionnaire was made available on

the Internet from July 2009 to February 2010. Explainers were contacted via the Pilots Hub, the European social network created on the initiative of Pilots and hosted on the project's website, as well as by an invitation sent to the member institutions of Ecsite and national professional networks involved. A total of 236 questionnaires were thus received and analysed.

Results showed that, while the job remained student employment for younger explainers, it was considered a true profession by older explainers who have made it their career. The average age of European explainers is over 30, and the majority of them hold permanent positions (nearly three quarters of those over 30). That said, the high levels of education observed in employees, with a greater share of women amongst the most highly qualified, merits a more in-depth study on the choices and motivations of explainers. It would be worth finding out more specifically whether explainers have made this a genuine career choice, or whether they seized the opportunity by default, for lack of other career prospects after graduation, a phenomenon that is more pronounced for women due to the vertical segregation observed in scientific sectors in Europe.

The core of the explainer profession remains primarily accompanying the public in exhibitions or during workshops. As such, science explainers see themselves as "science entertainers", an image shared by their managers. Project design and coordination activities, also an important part of the position, are nevertheless carried out by a smaller share of explainers. But the distribution of types of task seems to be made irrespective of age, education, job category or seniority: design activities are not reserved for the most senior or the most educated. Rather, it follows a cumulative logic with the addition of tasks to the core duties (which remain primarily accompanying the public in exhibitions and during workshops). Science explainers are dealing with a predominantly family-based public. But apart from the younger audience, explainers and their managers alike unanimously recognise that addressing an adult audience requires specific skills, without that resulting in a form of interpretation developed more specifically for adults.

Although there is unanimity on how the profession of explainer is perceived, there are diverging views when it comes to training. 60% of managers indicate that they provided relatively long training programmes for newly hired explainers, but only 25% of those explainers declare having benefited from them. The main training challenges have less to do with the core duties, i.e. dealing with the public for which the majority of explainers are trained, than the less visible side of the profession involving the design and management of interpretation projects. These skills deemed secondary by the organisations are nevertheless what explainers request the most in terms of training.

Despite their high level of education, explainers are recognised within museums mainly through their role with the public. It is nevertheless important to continue building a more complex image of the explainer profession through the promotion and development of project design skills, as well as a more dynamic image through a more in-depth investigation of the logical progression of their career, as much in the choice of career as the potential for advancement available both within and outside of the institutions.

2 Methodology

The methodological aims and choices for defining the main objectives of the studies (qualitative and quantitative) were set in collaboration with all of the Pilots project partners, and more particularly the SISSA Medialab (Trieste) and the Museo Nazionale della Scienza e della Tecnologia Leonardo da Vinci in Milan. Survey coordination and data analysis were conducted jointly by the Cité des Sciences et de l'Industrie's department of cultural action and department of strategic studies.
The objectives of both surveys were to gather information on four main topics:

- The professional development and career paths of science explainers. This includes a description of university programmes and professional experience.

- The core duties of the explainer: the main thrust of the job, with a more specific analysis of the more frequent activities or those considered to be the core duties: those in front of the public as well as those carried out beforehand involving the design and creation of interpretation tools. This is accompanied by a detailed analysis of the levels of expertise sought, as well as training needs.

- Skills: skills and/or know-how required for the activities carried out by explainers, in all fields of expertise, with a special focus on the adult public.

- Training: orientation training and further training provided by the institutions, explainer training needs and requests, once again with special focus on the adult public.

3 Overall conclusions

The profile of explainers in European museums and science centres has significantly changed compared to the results of the study conducted in 2004 as part of the DOTIK project. In addition to the population of young explainers working over the course of their studies, there are the older and more educated explainers who see their job as a true profession as opposed to seasonal employment. As though the generation observed in 2004 were still there in 2010, working in the same positions but with different representations and expectations. And with motivations and ambitions that have evolved as well.

The diversity of the tasks they deal with was already known, but it is interesting to underline that there is, on the part of the explainers, a focus on the "in front of the public activities":

> *"The time we spend with the public is important and in my opinion it is the cornerstone of what we do. All what we do is done in the perspective of that specific moment."*

It is only in furthering the questioning that they conjure up the hidden aspects of their work and their importance. For their training needs as well, they first express the need to know more on how to deal with the public. Only afterward do they evoke other training needs (technical, organisational, etc).

It is interesting to note that there is no clear distinction between the different types of visitors. Explainers must adapt to all visitors. They want to know how to deal with all kind of publics and have no specific interrogation about how to deal with adults, apart from their interrogation on "how to involve more the adults, in the proposed activities?"

In any case, we must take into account this distinction: adults in family groups versus adults alone, for the tools that we will have to give to the explainers. We should try to find a good balance in our training module between tools to interact with adults in family groups and tools to design activities and to interact with the adult public specifically. As for now, it seems that, in the eyes of the explainers, the adult public is not yet clearly identified as being a public with specific expectations. They seem to underestimate the science and society interrogations of adults and the role that they can play in giving those adults the tools to make their own opinions.

The Pilots study also paints a more complex picture of the daily action of explainers, both in the public eye and in the less visible, but equally necessary, moments of project design and management. It provides a wider panorama of the skills mobilised by explainers. While versatility remains the watchword of the profession, it would be wise now to delve deeper into the matter by working on a directory of Europe-wide skills, much like some of current initiatives in the more general cultural (Cortex Culture Emploi) and museum (ICTOP) professions. A detailed analysis would classify all of the skills required to be an explainer, and give a structured vision of the profession, heightening its recognition within cultural institutions.

It would thus be advisable to supplement this analysis by including a dynamic vision of explainer career paths. The first step would be a more in-depth study of initial avenues by identifying explainers' motivations for choosing the profession, particularly with respect to previous university studies and to analyse whether they made their choice by default or not. The second step would be to determine potential career paths to find out the potential for advancement within or outside of institutions. An understanding of their career progression could also be gained by questioning former museum and science centre explainers to find out what they were able to work as after being an explainer. If it served as an entrance into professional life, is it really a springboard and if so where to? If it is a transition phase, does it enable future scientists to acquire solid communication experience

with the public or does it more often give young professionals the opportunity to get a foot in the door and then occupy other positions at the museum?

A different representation of the profession emerges clearly between explainers and managers. Managers view the explainer mainly—if not solely—in the presence of the public, ignoring the hidden part of the iceberg that represents all of the activity design and coordination tasks (project management). While explainers chiefly play the role of actor before their audience, we must not forget that they are also the ones who fill the role of director, set designer, and sometimes even stage manager if not maintenance person. That is why the training needs explainers expressed the most focused on skills that had less to do with relations with the public. But these same skills were also deemed secondary by managers. While it is important to pursue training efforts on obvious skills that all explainers need to interact with the public, special attention should be paid to those skills that are seen as secondary but that are just as essential to the explainer's day-to-day work, and particularly those that deal with project coordination and management or knowledge of different types of public. This development could also only be made in close collaboration with museums and science centres, to ensure that these new skills meet real professional needs and are recognised by the organisations.

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