## Comment

# Who are the Explainers? A case study at the House of Experiments

## Miha Kos

### Introduction

Hiša Eksperimentov (The House of Experiments) is a very small science centre. We are situated in the centre of Ljubljana, the capital of Slovenia. The gross area of the centre is only 500 square meters and we meet around 25,000 visitors per year. We were opened for the public in the year 2000. In the Hiša Eksperimentov there are four full-time employees and around 10 persons working and paid by fees.

There are specific institutions present in Slovenia so called Student services. They help students in finding paid job on daily basis. The state still encourages students to work by lowering the taxes for their job. There are around 25 students working as explainers in Hiša.

Here are some facts about Slovenia. The population is around 2 million in the area of 20,256 square kilometers. There are 18 students per 1000 inhabitants. One can play a game with numbers – taking into account the area of Hiša and the population and area of Slovenia one can calculate that there is one person expected in an area of the size of 20 science centers. And there are even much fewer students present in the same area. But the number of visitors and students working in the center proves the density is larger. Therefore science centers do concentrate the population!

#### **Explainers in Hiša**

Explainers in Hiša are mostly the students of age between 17 and 27, who are starting their careers, who are seeking answers and have energy to change the world. They are enthusiastic, ready to listen and help. They have a very important mission while doing their work in Hiša:

• They are the most direct link between the administration, developers, activities planners ... and the public. People are addressing them with questions concerning exhibits, science shows, discounts, finding the toilet, nearest bank machine, closest restaurant and where are some other tourist attractions in the town. Explainers have daily contacts with the visitors. They hear suggestions, comments and critics. Therefore it is so important for the explainer to be a good listener. It is therefore also so important to listen to what explainers have to say to the administration of the Centre. Many things have already been improved as a result of this communication.



They are the Science Center's sensors as well as everyday spokesmen. They should "feel" when there is a need to approach and help and when just to wait and enjoy seeing the visitors to find the things out by themselves. They are the persons that represent Hiša in the eyes of public. By analyzing the book of impressions we are constantly monitoring the visitor's response after visiting the centre. The kindness of explainers and their readiness to help is an issue that counts very high in the eyes of the public. Therefore we take the education of explainers in Hiša very seriously. Being an explainer you also show the public what is science and how one should acquire, learn, reach and teach the knowledge. They also teach one of the basic rules of Hiša: "Do not explain what you do not know – admit what you do not know". One should explain where one should seek and probably find the answers.

#### The circle of life of an explainer in HE

As pointed out earlier an explainer does have to have many qualities in order to be a successful presenter and a spokesman of a science centre. We put a lot of effort in the process of explainers' education and observation of their work.

Since explainers are mostly students they have a limited time working in the Centre. After they finished their studies, they can not work further through the Student service institution. Explainers are aware of that fact and therefore take working in the Hiša as a work that brings "business and pleasure" at the same time. While working in Hiša they learn acting in public, communicating science, working in a team, communicating with scientists and they also gain some new scientific knowledge.

As told by explainers, we are one of the best choices for them, when they are looking for a temporary job. This is also why there is relatively high desire among students to work in the Centre.



We must run the interviews in order to choose the most suitable students for the tasks they will do while working in the House. In the interviews the human resources commission includes also an ex-explainer, who is now an employee. With his/her experience it is much easier to find the jewels among students being interviewed.

The most valued qualities for accepting a new explainer are:

- Communication skills (self expressing, sense of humor, art of listening...)
- Self control under stress
- Previous experience in working with the public
- Desire for learning
- Admitting what she/he does not know

After being accepted to work as an explainer one starts working first as apprentice. One first has to go through all the exhibits by him/herself as well as with some mentor explainer from the higher group. Later one has to show the knowledge to examiner. The apprentice is expected to have knowledge about all the exhibits, but not necessary more that it is written on the explanation boards beside the exhibits. One is expected to say "I do not know that but I may ask someone and come with the answer or suggestions" when one is asked more that one knows.

After the oral examination being successfully passed the apprentice becomes a pilot. The Science Centre Hiša Eksperimentov is open from 9 to 15 during weekdays, and from 11 to 19 on weekends. Each day three explainers are in charge. The majority of explainers are the pilots. The pilots with the best skills are later promoted to become demonstrators and further to masters. The latter are responsible for the operation of Hiša during weekdays.



Therefore there must be at least one master working on weekends and at least one demonstrator or master during weekdays.

After an explainer looses the students' status we encourage them to further cooperate with the Science Centre. The knowledge they gained through years working with other explainers and permanent Science Centre stuff is too valuable to be wasted. In Hiša Eksperimentov we run several activities besides offering the permanent exhibits. There are workshops, science adventures, mini science adventures.... Science adventures are 30 - 40 minutes long science shows about different areas of science with a lot of interaction with public and with a lot of experiments shown. Some of the Science Adventures' titles are: Soundology, Lightology, Bubbleology, Gasology, Eggology .... They are suitable for visitors of all ages. It is the presenter's task to adjust the lecture to the age and capabilities of the audience.

Good explainers are encouraged to qualify for becoming a lecturer of Science Adventures (Science shows). They can get paid on payment by fees basis.



Also the explainers who show an interest in working in exhibits development are encouraged to do so during their student status as well as afterwards.

#### Team building and education of explainers



It is very important to have a high motivated and satisfied team of explainers. Although we are just 4 permanent employees in Hiša we try to put a lot effort in keeping and working with that sort of explainers team. Therefore we run several activities.

- Every month we held regularly meetings with all the explainers. It is an open discussion of the problems, suggestions and solutions that arose during that month.
- We are having daily meetings with those in charge of things going on that day.
- Board of suggestions, problems and solutions is present for all the facts that need a fast response when it appears.
- We organize several courses for explainers (walk through exhibits with their authors; courses for becoming lecturers; science adventures; mini science adventures...).
- Explainers are included in several projects (EU project DOTIK, The Year of Physics project ...).
- All the explainers (as well as ex explainers) have a free invitation to all Hiša's events.
- Social events:
  - picnics
  - dancing courses
  - celebrating explainers birthdays in Hiša ...

#### Conclusion



Explainers are a very important factor in the life of a Science Centre. Through their daily experiences by communicating with visitors they are a source of knowledge for the Science Centre administration, exhibits development and education stuff in order to enrich their offer to the public. A huge effort has to be put in opening free communication with the explainers because this is one of the most important ways of sensing the public and react fast enough to changes. Therefore it is important to build a highly motivated and satisfied team of explainers.

## Author

Miha Kos was born on 1962 in Slovenia. He worked as the assistant professor in the Physics dept. at the University of Ljubljana, Slovenia. Postdoc studies in Albuquerque, USA. After returning to Slovenia he tried to establish the first "hands-on" science centre in Slovenia and succeeded in 1996. The House of Experiments got the first permanent premises in 2000. Since 1996 he is directing the centre. Email: miha.kos@h-e.si