

## Comment

# Training science centre Explainers. The Techniquiest experience

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### Introduction

Techniquiest was established in 1986, and in 1995 moved to its current premises at Cardiff Bay, South Wales. This was the first purpose-built science centre in the UK. It receives around 200,000 visitors every year to its exhibition, and to its programmes for schools and public audiences in the theatre, laboratory, discovery room and planetarium. The author joined the Techniquiest project in 1985, became a staff member in 1990 and was the Chief Executive from 1997 until his retirement in 2004.

Techniquiest has three “out-stations” in Wales, and is responsible for the supply and maintenance of exhibits to the Look Out Discovery Centre in Bracknell, England. There is a Techniquiest gallery at the Lisbon Pavilhão do Conhecimento - Ciência Viva, and a traveling exhibition, SciQuest, in South Africa which was also supplied by Techniquiest.

All these centres rely on the effective intervention of “Explainers” (at Techniquiest we call them “Helpers”) to provide the best possible experience for visitors.

At its most demanding, the tasks of an explainer are varied and intensive, yet there may be times when the duties are mundane or even dull. When you rely on people to act as both hosts and housekeepers, to provide both support and stimulus, and to be both welcoming and watchful, you are asking a great deal. This article raises some of the issues concerned with the recruitment and retention of Explainers, their training and management, and the way in which their role is recognized and valued by the science centre as a whole.

### What do we expect of a science centre explainer?

We place a wide range of duties and expectations upon a science centre Helper, who – perhaps even within the same day – can be called upon to act as:

- car park attendant – directing traffic, protecting spaces for handicapped drivers
- host – welcoming smile, explaining what’s on offer
- announcer – using public address system
- cashier – receiving payments, secure cash handling
- cloakroom attendant – helping with coats, buggies, toilets
- orientation guide – showing visitors their way around the centre
- local expert – advising on other local attractions, transport etc
- scientific explainer – explaining the science behind the exhibits
- busker and entertainer – varying the pace and style of learning
- cleaner – cleaning exhibits, clearing litter, food scraps ... or worse!
- security guard – watching out for trouble: misbehavior, intruders, child protection
- sales person – selling memberships, future events, souvenirs, refreshments
- presenter – presenting shows and demonstrations
- source of feedback from visitors – evaluating exhibits and programmes

## Choosing and using your Explainers

In different countries and in different institutions the policy for choosing Explainers will vary. Early in its life, Techniquest took the decision to employ Helpers from a wide range of backgrounds, male and female, younger and older. In this way we ensure that every visitor has a good chance of meeting someone with whom they can talk comfortably. Our practice has been to engage the Helpers as hourly-paid employees with a high degree of flexibility in their work patterns. They may work for as little as one day per week, or for as many as six days. They may work at the weekend or on week-days, or both, and (within certain limits) they can negotiate their daily start and finish times.

Although Techniquest has been grateful for a certain amount of free assistance from volunteers from time to time, it has not been regular practice to engage volunteers alongside the paid staff. In the USA, particularly, there is a “volunteering culture” which is quite different from what is found in Europe. However, it should be acknowledged that among the older Helpers at Techniquest there are people who have effectively chosen to volunteer their services, as the payment they receive does not reflect their former experience and status.

It is important to recognize that Explainers are motivated in many different ways. Some Techniquest Helpers have scientific expertise, but by no means they are drawn to the job by science alone. Many are people who enjoy the variety and spontaneity of working with the public, and all have the kind of personal qualities which make them good communicators and easy to approach. They are not normally good at everything, however, and this raises questions of both policy and training. Should you allow your Explainers to specialize (e.g. in one area of the exhibition or in one aspect of customer service) or should you aim to produce flexible team members with a wide range of competences? Whatever your answer to this question, a trained Helper needs:

- Information – facts and figures about the organization, its goals, activities and procedures
- Guidance – e.g. how to dress and how to behave when working with visitors
- Support – skills training, access to sources of help
- Encouragement – rewards and opportunities
- Appraisal – professional advice and a chance to give and receive feedback

## The training challenge

Given the range of individuals employed, and the variety of work patterns they follow, there is of course a training challenge. Everyone is different in their:

- training needs
- skills and previous experience
- availability for training
- attitudes to the training process
- ability to learn new skills
- requirements for encouragement and support

Techniquest has evolved some strategies to meet these elements of challenge with varying degrees of success. An assessment of training needs is undertaken when a Helper first joins the organization, and this is periodically reviewed. Many people bring considerable knowledge, skills and experience to the role – indeed, it is by no means uncommon for Helpers to be highly qualified academically and/or to have significant “life skills” which can be applied to support both visitors and other staff. Because of the part-time and varied work patterns it is hardly ever possible to gather the entire Helper staff together in one place (typically there would be 55 individuals employed at any given time). Nevertheless, there are two or three occasions every year when all Helpers are required – if at all possible – to attend a “Helper Evening”, which begins with a meal and continues with a variety of small-group and plenary activities.

The expectations placed upon a Techniquest Helper have been grouped into three categories: Customer Service, Team Work, and Business Needs. Customer service includes areas such as:

- Exhibit awareness and use
- Personal presentation
- Local knowledge
- Front desk operation
- Interaction with visitors

It is unrealistic to imagine that all Helpers will have a full understanding of the science behind all the exhibits, but it is important that they can guide visitors in using the exhibits and exploring their possibilities. In many cases a Helper will have some specialist knowledge about a number of the exhibits, either from prior experience or as a result of in-house training. The key skill, however, is to be able to “tell appropriate stories” which help others to make of the exhibit what they can. Then, if it turns out that the visitor requires specialist assistance, the Helper needs to have the confidence to be able to refer them to an expert – ideally there and then.

The importance of personal presentation needs no emphasis here: a simple uniform is provided, and Helpers are expected to keep it clean and tidy, and to present themselves well. The use of chewing gum or mobile phones while on duty is both forbidden, for instance.

Techniquest is situated on the waterfront at Cardiff Bay near to shops, restaurants, hotels and public transport. The home of the Welsh National Opera is close by. Staff members need to be well informed about all these opportunities. Enquiries of this kind often take place at the ‘front desk’ where tickets are sold. “Front desk operation” is a demanding role, especially when the visitor flow is high. Arrival at Techniquest involves a number of choices (e.g. whether to include the planetarium, theatre or discovery room) and opportunities (e.g. use of cloakrooms, shop, cafeteria, lift). Front desk staff is therefore responsible for cash-handling, visitor orientation, and for solving problems like lost property (or small children!). Their interactions with visitors are the most varied and most urgent, and it is important for this area to be staffed by experienced Helpers and to supervise them well.

Team work includes aspects of the role such as:

- Using initiative
- Working with other staff members
- Working under pressure
- Sense of responsibility
- Development of others
- Interpersonal style

A range of training activities has been developed to provide new and experienced Helpers with the opportunity to acquire greater self-awareness and a mature status within the organisation. Mutual support between staff members of different backgrounds is an important component in this work, but guidance and opportunities for learning through discussion are provided for all.

A sensitive area relates to child-protection legislation, and policies have been developed to ensure best practice in this matter. All staff members are subject to checks through the Criminal Records Bureau, and training is given in the appropriate ways of dealing with children who may become lost or distressed. Staff is also required to be vigilant about the behavior of other adults, especially visitors arriving on their own. Occasional warnings have been necessary in connection with the possible abduction of a child by an estranged parent, for instance. No-one works in this delicate area alone: staff whose suspicions may be aroused must immediately inform their team supervisor in case some intervention may be needed.

In the third category - Business Needs – Techniquest expects the Helper to take a share of responsibility for:

- Exhibit maintenance
- Exhibition cleanliness
- Communication systems
- Punctuality and attendance
- Awareness of the Centre’s mission

Maintaining the exhibits themselves is the responsibility of a specialist team, but it is the task of Helpers to monitor the condition and operation of all exhibits. They report all faults or requirements on a computer-based system adjacent to the exhibition, and this system includes a reporting system which indicates when and how the problem will be addressed. Staff can then explain this if it is necessary to leave a non-functioning exhibit on the exhibition floor.

From its first opening in 1986 it has been Techniquet's practice to require Helpers to clean the exhibits and the exhibition floor during the half hour after the exhibition has closed to the public. This is not a welcome task at the end of the day, but a good team will ensure throughout the day that the exhibits have been kept in good condition and litter has been continuously removed from the floor. Cleaning the exhibits with a suitable disinfectant and vacuum-cleaning the (carpeted) exhibition floor is carried out after the visitors have gone. An external contractor is responsible for cleaning in all other areas.

The other items listed in this category do not require further explanation.

### Helpers training at Techniquet

The pattern of Helper training at Techniquet has evolved over the nearly 20 years of operation. It now includes:

- Induction and trainee status
- Personal apprenticeship
- Group training, e.g. Helper evenings
- Training literature
- Specific courses, e.g. "Welcome Host", first aid, manual handling
- Appraisal system

On appointment a Helper receives a name badge to indicate that s/he has "trainee" status. They need to work with visitors from the beginning, so they need to be protected from unrealistic expectations. During this short period of personal apprenticeship they are partnered with an appropriate "buddy" who introduces them to key information and skills that the role requires. Group training is then organized, for small numbers and for the Helpers staff as a whole, and this is supported by training literature. All Helpers have to undergo certain specific courses, such as the safe handling of equipment and "Welcome Host", a visitor-focused programme validated by the local tourist board.

Linked to the Helper training is an appraisal system with a framework which relates to the three areas: customer service, teamwork and business needs. It provides for assessments on a 5-point scale: Excellent, Good, Acceptable, Poor, In Training. In order to ensure consistency between appraisers, standard descriptors are used (see box below) – and there is an extra section for "skills beyond job description", such as other qualifications, life experiences, and languages. Feedback and target-setting arises naturally from this process.

**Box 1:** Standard descriptors from the appraisal system: Use of initiative.

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| <ul style="list-style-type: none"> <li>A. Is always able to see what is necessary and completes the task to a high standard.</li> <li>B. Is generally able to see if a job needs doing. Occasionally needs support in carrying out the task.</li> <li>C. Is willing to carry out tasks once the need has been shown.</li> <li>D. Requires frequent direction to see and complete tasks.</li> </ul> |
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### What is the added value of Explainers in Museum Communication?

Explainers are the essential "front end" of a museum or science centre. Their role is to welcome the visitors, not to guard the objects. They need to be perceived and trained as personal guides, not institutional officers. Within the exhibition they are there to animate the experience, not to offer it to visitors on a "take it or leave it" basis. We expect them to teach, but to do so by example and practice,

not by didactic instruction. It is their task, whenever possible, to explain the science to those who want to know more, but more particularly they should be given the skills to ask the right kind of questions to deepen and enrich the visitors' experience. Finally, they have a crucial role in gathering feedback on exhibits and visitor behavior, and helping the Centre to respond accordingly.

### **Conclusions**

The Helpers/Explainers are the first people your visitors meet, and they are the staff members with whom they have most contact. The first impressions of your visitors are critical – and so are the Helpers! They must smile, they must look you in the eye, and they must listen. They must be alert and watchful, but never interfering. They must have the confidence to seek help elsewhere if they cannot deal with a situation themselves. Training, support and encouragement for Explainers are therefore the key responsibilities of management.

### **Acknowledgement**

I am grateful to Jo Pinder, formerly the coordinator of Helper training at Techniquiest, for her advice on this account – and also for her excellent work in refining and implementing a scheme of Helper training of which Techniquiest could be proud.

### **Author**

From 1997-2004, Colin Johnson was the Chief Executive of Techniquiest, the UK's first purpose-built science discovery centre. He was the founding Chair of ECSITE-UK and has served the sector internationally in a number of capacities, notably as a board member of ECSITE and of ASTC. His earlier background is in the formal education sector. In retirement Colin Johnson has undertaken the voluntary role of Executive Vice-President of the BA (the British Association for the Advancement of Science) with particular responsibility for Young People's Programmes. The author welcomes correspondence and may be reached by email. The first part of his address is 'colinh.johnson' and the second part is '@ntlworld.com'.