

Evaluation of the redeveloped Launchpad: Special Educational Needs.

June 2008

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(SEN Teacher)*

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Audience Research and Advocacy: Learning

TOPLINE FINDING

The new Launchpad gallery is engaging and accessible to SEN groups. Teachers felt that the multi-sensory hands-on nature of the gallery was highly appropriate for their groups. The St. Ann's teachers did not feel that the new Launchpad space and exhibits presented their groups with any physical barriers. This is in contrast to findings from the evaluation conducted with SEN teachers in the Old Launchpad.

The students enjoyed their visit to Launchpad and teachers felt that it provided a highly educational and fun experience. This helps us to achieve our aim to be the most admired museum by all visitors within our audiences.

However, teachers did experience both physical and intellectual barriers when visiting the wider museum.

MAIN RECOMMENDATIONS

These recommendations fall into two groups. The first group identifies ways of improving access for SEN groups to the Science Museum – if users cannot access the Science Museum they will not visit Launchpad. The second group of recommendations relate specifically to new Launchpad and its operations. These recommendations must be taken on board if we are to make SEN days of the highest standard possible.

Recommendations for enhancing access to the Science Museum.

- Car/coach parking directly opposite Groups Entrance must be made available to all SEN groups. Not having assured disabled car parking within the museum area presents a significant barrier and means that many SEN schools are unable or reluctant, to visit the Science Museum.

- Information appropriate to Special Educational Needs should be available on the 'Educators' section of the Science Museum website. This should include:
 - Advice on how to fill our risk assessment forms. This could include examples of risk assessment forms that had been filled out by other SEN teachers.
 - A museum map showing accessible routes around the museum. This map should include where lifts, accessible toilets, changing facilities and eating areas are.
 - Car/coach parking information and advice.
 - Images of the museum, both internally and from the outside. This will help teachers familiarise children with the museum before their arrive helping to reduce any anxieties the students might have.
 - Photos of both male and female explainers in uniforms and pictures of other uniformed staff such as warders. Pictures of staff member are

particularly important because some children with SEN feel fearful of adults they do not know.

- Recommended timetables for SEN groups, providing an option of events outside of Launchpad that may be appropriate to specific SEN groups.
- Ways of reassuring SEN teachers that Launchpad and the Science Museum are appropriate, engaging and inspiring for their students.
- Ways of reassuring teachers that experiences within Launchpad have been developed with their needs in mind. This could be done through:
 - Quotes from teachers who have visited recommending a trip or particular things to visit.
 - Top tips from other SEN teachers about how to plan a trip.
 - Section outlining how we have catered for their needs.
 - Staff training: once underway, details of staff training - diversity training, visits to SEN schools.

Recommendations for new Launchpad

- Two designated Explainers one of each gender, should continue to be assigned to each booked SEN group. Having the exclusive use of Explainers was important to both children and staff members.
- These Explainers should receive audience diversity training and have a day-visit to an SEN school. This will not only give SEN teacher more confidence in our staff but make staff more confident when doing their jobs.
- A changing area needs to be identified for SEN groups near the Launchpad gallery. Currently the first aid room on the ground floor is being used as a changing area; however this is not ideal as at least one member of staff has to leave the group for a significant period of time in order to change one child.
- A designated lunch area should be offered to all SEN groups. Groups should have a choice as to whether these are closed rooms or open spaces cornered off. This is partially important to SEN groups as some children do not feel comfortable in open spaces and others fear enclosed ones.
- Picture-based communication¹ or Picture Exchange Communication Symbols PECS² should be incorporated in to the Launchpad Gallery. This could be a simple system developed for little cost in the museum. Teachers could download and print of pictures from the web site, on SEN days in LaunchPad children could bring the symbols and place them in on exhibits and areas they visit. For example if a child is going to the Garden they could bring the appropriate symbol and place it on a sheet of paper at the door. Picture

¹ Picture Based communication is a communication system that uses pictures to help Children/adults who have difficulty communicating.

² PECS is a specific picture communication exchange system. It was developed in 1985. The foundation for the system is the PECS Training Manual (Frost and Bondy 1994).

exchange communication symbols are used widely in both SEN and none SEN schools, they are particularly effective when used with children who have autism.

- Sharing the gallery with one other SEN group worked well and should continue and be encouraged.

INTRODUCTION

During the redevelopment of Launchpad gallery the Disability Awareness Co-ordinator provided detailed advice on disability issues such as exhibits, information and appropriate signage.

In addition, in 2006, evaluation was conducted with SEN teachers in order to assess and understand their and their children's needs in relation to a visit to the Science Museum and specifically to the Launchpad gallery.

As a result of this work, access was a major consideration during development and influenced design, interpretation, exhibits and operations. The new Launchpad gallery opened in November 2007.

METHODOLOGY

In September 2007 The Science Museum began a year-long partnership with the Museums, Libraries and Archives (London) and St. Ann's School in Merton, London. The result of this partnership was an audience research project into the needs, wants and expectations of SEN teachers and students when visiting the new Launchpad gallery. This research formed part of the summative evaluation of the new Launchpad.

St. Ann's School is a school that caters for pupils age 2-19. Children attending this school have severe learning difficulties. A large number of pupils also have physical and sensory disabilities. The school also has children with autism.

During the project four visits to the Science Museum were conducted by the school and two visits to the school by the Disability Awareness Co-ordinator were made:

- December 2007. Three teachers, who would be bringing their classes later in the year, came for a one-day visit to do their own research and to prepare for their trip with the children. During the visit the teachers talked with different members of staff involved in the planning of this day: the Bookings Office, Team Leaders, Science Night staff, the New Audience Advocate and the Disability Awareness Co-ordinator. They were able to ask questions and point out potential challenges they might have and identify what would make the visit easier.
- In the following three visits the school children visited Launchpad. These visits happened on SEN days in January, February and March of 2008. The children brought to the museum were from KS2/3 classes and had a wide-range of disabilities
- The Science Museum's Disability Awareness Co-ordinator visited St Ann's school towards the beginning of the project in November 2008. When the school visits to the museum were over the Disability Awareness Co-ordinator visited the school again. This took place in June 2008, during which time she conducted in-depth interviews with the teachers.

AIMS

The aim of this evaluation was to discover how effective the New Launchpad gallery is when dealing with Special Educational Needs schools. This report will present:

- How the Launchpad gallery works for SEN students and teachers
- The challenges facing teachers from SEN schools.
- Suggested ways the Science Museum could overcome barriers for SEN groups in order to ensure that our SEN days are the most accessible, innovative and of the highest quality possible.

FINDINGS

BEFORE A VISIT

Logistics of a visit to the Museum

- Teachers felt that having appropriate information available before a visit was crucial to the visit's success. They felt that this information would be best placed on the website under a specific area for SEN groups. It was important to teachers that if this information was available on the web it was in one obvious place.
- In particular teachers said that the following information was particularly important to access prior to a visit:
 - Advice on how to fill their risk assessment forms. This could include examples of risk assessment forms that had been filled out by other SEN teachers.
 - Accessible museum map showing accessible routes both to the museum and at the museum itself
 - Car/coach parking information and advice.
 - Recommended timetables for SEN groups, providing an option of events that may be appropriate to specific SEN groups. This could include not only areas that can be booked into but other galleries that might be of interest to SEN groups.

Previous evaluation with SEN teachers during the development of Launchpad, also highlighted the need for the above types of information to be provided.

It is important to remember that SEN students visit both with SEN schools and with non-SEN schools and therefore changes made will benefit all school visits.

Access to the Museum

- Without car/coach parking facilities close to the museum St Ann's school would not have been able to visit the Science Museum. It was particularly important to them as the driver is a member of staff so needs to stay with the children throughout the visit. It was not only the children who were wheelchair users that needed to park closely to the museum but those with behavioural

problems who teachers feared would run off and endanger themselves whilst making their way from the bus to the Museum.

- Many schools (including mainstream schools with SEN students) uses PECS – Picture Exchange Communication Symbols. It was suggested that the Science Museum incorporated PECS into their SEN days. This could be done by the children and the Science Museum having matching pictures of objects and places they are going to visit in the museum.
- Teachers involved with this project felt their initial visit to the museum was invaluable as it allowed them to see the Museum and meet members of staff. They were aware that whilst this would not be possible for all SEN teachers it was important that all SEN teachers were able to have contact with members of staff before a visit. This is because it enables them to feel more prepared before the visit and more relaxed during. This could be done through a SEN teachers day that is run for a number of SEN teachers annually.
- Teachers appreciated the efforts that the booking team went to accommodate their visit. They were impressed at the team's commitment to giving their school the best visit possible, this was particularly helpful in the lengths staff went to ensure the school had parking facilities on the day.

Access within the Museum

- Teachers felt that finding their way around the Museum could be challenging without a member of Science Museum staff. They suggested that having an accessible map available with key points of interest and accessible routes for SEN schools would be a great help. This could be available from the website and/or Groups Entrance.
- Although teachers appreciated that the adapted toilets were close to the Launchpad gallery they felt that children with particular toilet needs who would require changing facilities were not as adequately catered for. Teachers felt that having a changing facility nearer to the Launchpad gallery would be of great advantage enabling them to stay close to the other children. This changing area would need to be large enough to house a bed similar to that in the first aid room next to the Pattern Pod Gallery.
- Teachers felt it was important that all visitor-facing members of staff received training on working with SEN students. They felt that this would make SEN teachers feel more confident when visiting the museum. It was important to them that their needs were understood. This includes Front of House, Warders as well as Explainers.

DURING – THE LAUNCHPAD EXPERIENCE

Physical Access in Launchpad

- Teachers were very impressed at the standard of physical access in the Launchpad gallery. They felt that there is good access for wheelchair users and that children were also able to use and manipulate exhibits easily.
- Teachers 'loved' sharing the gallery with one other SEN groups from a different school. They liked the fact that their children got to see other children but it was not too overwhelming for them. They felt that this achieved a positive balance between sharing the experience with others (an important element of a trip) and not being overwhelmed. Particularly important for those with children who have fewer opportunities to experience the world outside their homes and schools.

"It was so good to see them with other children"

- Teachers felt that the staffed environment of Launchpad provided a safe space for their students. This meant that SEN groups were 'free to roam' around the gallery and were able to experience a sense of independence and ownership of their learning experience. This experience was important to the children and was empowering to them and not something always obtained from other trips out from school.

Access to the content and the learning experience

- Launchpad's multi-sensory interactive nature worked well with the SEN groups. The interactive exhibits enabled children to access science in a way that was not possible at school.

"The kids loved it because it was completely hands-on and that's how our kids work so everything in there was ideal for them, they could all access it at some level"

- Teachers felt the support of Explainers, who had science knowledge and were familiar with the interactives also helped children to access the content of the exhibits.
- Part of the appeal of the Launchpad gallery was giving the children the opportunity to have a social experience and be in the community. Social learning was an important part of the learning experience for SEN children.
- Teachers felt that having designated SEN days was necessary and allowed SEN groups greater flexibility as they could decide if they felt that this was the suitable time to visit for their groups.

Favourite Exhibits and the show

'Thinking back there were so many exhibits that they just loved!'

- Teachers felt that the most successful exhibits were those with a strong cause and effect element. Exhibits such as 'Air Cannon', Social Light' and 'Echo Tube' were very appealing to some pupils because they got an immediate response and felt like they had caused something to happen.
- One teacher said that a number of her pupils were very interested in the Pulley Pod. The teacher felt this was because it illustrated a very simple point in an experiential way children were able to see what was happening as well as physically feel it.
- Teachers felt that the second half of the Launchpad gallery³, was the more successful area with their groups, although they also mentioned a number of exhibits from the first half⁴ of Launchpad that they also felt were particularly successful. Those exhibits specifically mentioned in the first half were exhibits that had some sort of water element such as the 'Stretchy Water' and 'Icy Bodies'.
- 'Wind in Your Sails' was very popular with a number of the children with one teacher stating *'they really liked that'*. Again, the fact that there was a cause and effect that was very visible, and that they had a clear role in the interaction really helped.

The Bubble Show and the show space

- The Bubble Show was an important part of the groups' visit and an experience that the pupils really enjoyed.
- Teachers were impressed by the Explainers who delivered and assisted with the shows as they tried to get all the children involved. They felt that having four Explainers involved with making the show successful was really effective and meant that they, as teachers, could concentrate on individuals whom were struggling.
- Explainers made a real effort to get all the children into a human bubble. This was important to the groups as often some of their pupils get excluded because their behaviour is seen as disruptive.
- It was very important to the SEN groups that they had their own show. This allowed pupils to relax and not feel intimidated by unfamiliar faces in such a small space. It also allowed teachers not to feel that they had to over discipline their children because they felt they were disrupting someone else's show.

³ This comprises the forces and motion, electricity and magnetism and sound

⁴ This comprises of Light, material and energy transfer

- Teachers felt that Explainers could have used more of the show space. They suggested that they blew more bubbles in the show area where the children were seated and allowed children to have a go at blowing the bubbles themselves.
- Some teachers were disappointed that the bubble mix did not work very well in their shows. Since SEN teachers have to put a huge amount of work into planning a trip this was particularly disappointing and teachers felt it showed a lack of understanding as to the amount of effort they had inputted into making the visit successful. Whilst this may appear to be a small thing, it is the sort of element which hugely impacts students' enjoyment and teachers' perception of the Museum.

Explainers

- 'Explainers provided positive role models for the children'. Children appreciated having someone who really 'worked' at the museum giving them attention and guidance.
- Having pictures of Explainers sent to the school prior to the visit was very important as it can be distressing for some SEN children to mix with unfamiliar faces.
- Teachers were not expecting the Explainers to have as much expertise in dealing with SEN groups as they did and were impressed at the level of confidence they had when dealing with both groups and individuals.
- Teachers felt that it was important for Explainers to have Diversity training and were pleased to know that this was something the Science Museum now offering.
- Teachers were felt it was important that the children had access to the knowledge and expertise of the Explainers:

"There is a certain degree of scientific explanation that the kids deserve and they provided it at an appropriate level ...and I thought that was really nice."

Note: St Ann's school are now keen to make the three visits to the Science Museum as an embedded part of their KS2 curriculum. They have already begun to make enquires into booking visits in the first three months of 2009.